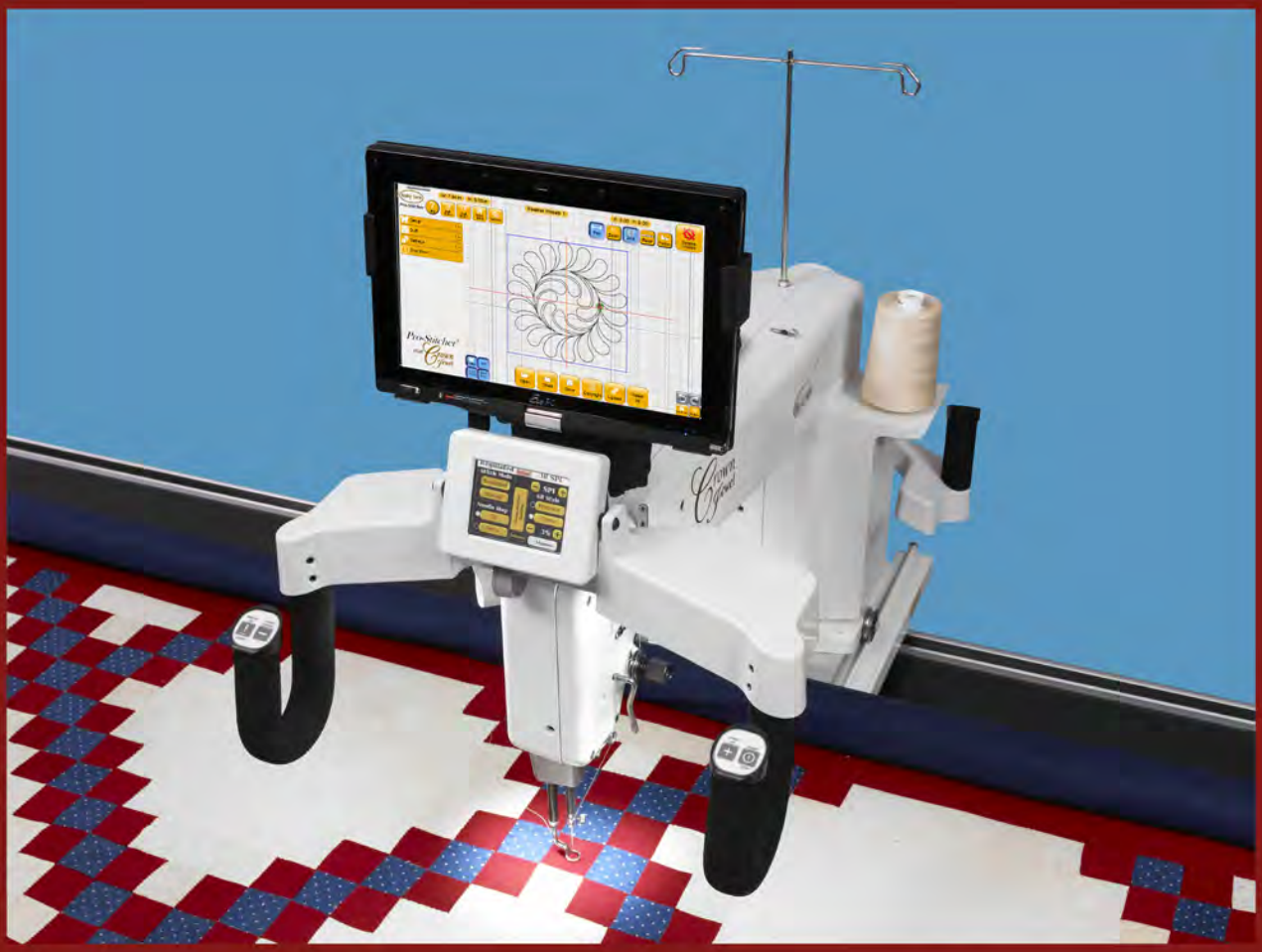
Pro-Stitcher®

Instruction and Reference Guide

Model BLPS3



baby lock

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Baby Lock Consumer Helpline: 800-313-4110

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2. Important Safety Instructions

Save these instructions

This machine is intended for household use.

Disclaimer

Baby Lock and its Representatives are in no way legally responsible or liable for damage to the Pro-Stitcher when used improperly or not in accordance with the guidelines stated in this manual or when used on machine quilting frames not recommended by Baby Lock.

Read all instructions before using

When using any machine, basic safety precautions should always be taken, including the following: Read all instructions before using.

DANGER - To reduce the risk of electric shock:

The Pro-Stitcher installed on your quilting machine should never be left unattended when plugged in. Always unplug the machine from the electric outlet immediately after using and before cleaning.

WARNING - To reduce the risk of burns, fire, electric shock, or injury to persons:

- Do not allow to be used as a toy. Close attention is necessary when this quilting machine is used by or near children.
- Use this quilting machine only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
- Never operate this quilting machine if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the quilting machine to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
- Never operate the machine with any air openings blocked. Keep ventilation openings of the machine free from the accumulation of lint, dust, and loose cloth.
- Never drop or insert any object into any opening.
- Do not use outdoors.
- Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
- To disconnect, shut down the computer, then disconnect all cables.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Keep fingers away from all moving parts.
- Always unplug the machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.

Read these instructions before using the machine.

To use the machine safely

1. Keep hands and loose clothing away from wheels, gears or other moving parts.

2. Turn the machine off and unplug the cord in the following cases:
   - when you have stopped using the machine
   - when you replace or remove the quilting machine needle or any other part
   - in case of failure when you use the machine
   - when you check or clean the machine
   - when you leave the machine unattended

3. Connect the machine directly to the wall outlet. Do not use extension cords.

To increase the life of your machine

1. Do not store this machine in areas exposed to direct sunlight or high humidity. Never use or store the machine near a heater, an iron, a halogen lamp or other hot things.

2. Clean the computer monitor with a soft, lint-free rag. If necessary, dampen the rag with a small amount of isopropyl alcohol. Do not use any other cleaners on the computer monitor.

3. Use only neutral soaps or detergents to clean the carriage. Benzene, solvents and scouring powders can damage the machine and therefore should never be used.

4. Do not drop or bump the machine.

5. Always consult the manual to replace or fix any other part of the machine.

To repair or adjust the machine

- If the machine breaks down or needs adjustment, first check the troubleshooting chart in the appendix to inspect and adjust the machine yourself.

How to use this manual

Notes, important notes, and cautions

NOTE: A NOTE indicates important information that helps you make better use of Pro-Stitcher.

IMPORTANT: An IMPORTANT note provides information that is essential to properly using your Pro-Stitcher.

CAUTION: A CAUTION indicates a potential for causing harm to your quilting machine, the quilt, or to yourself.

3. Installation

Congratulations on your Pro-Stitcher® Purchase

Baby Lock is proud to offer you user-friendly quilting machines and computer-guided machines with the latest technology and the best value for your money. Because the world of computer-guided quilting is constantly changing, we invite you to keep up with us by checking our website frequently for news, software updates and tutorials.

Go to (www.babylock.com) for:

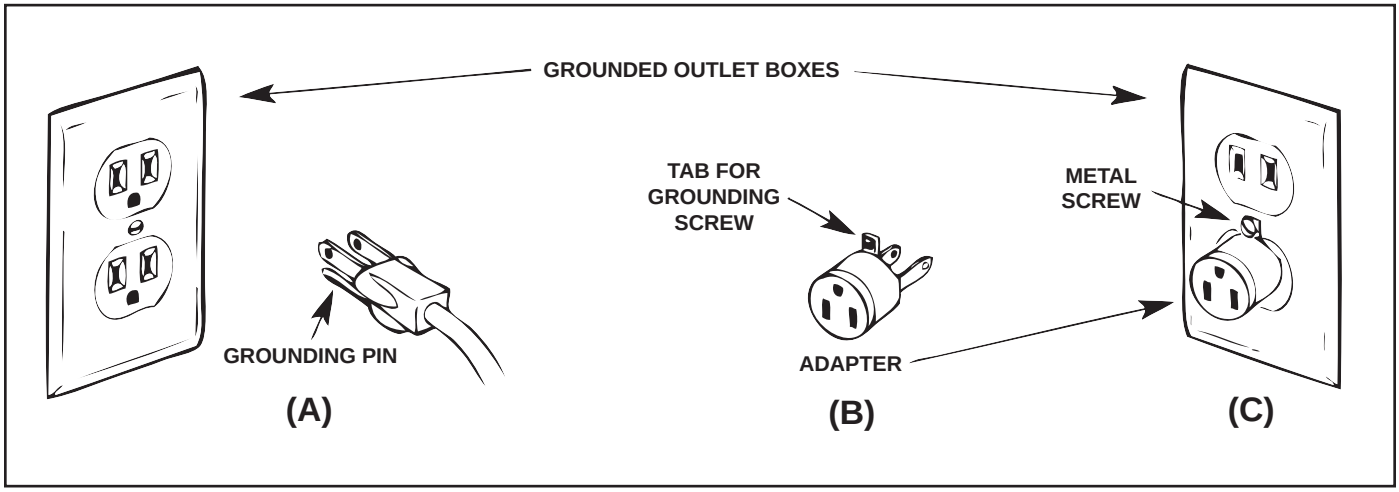
1. Updates to the Pro-Stitcher software *(provided FREE as long as you own your machine)*
2. A full-color version of this manual that can be downloaded and printed
3. Updates to this manual
4. Customer Support: www.babylock.com/support

Machine Packaging Information

Keep the carton and packing materials. You will need them in the event that you need to return the machine to Baby Lock retailer or send it for repair.

If you do not pack the machine properly or if you do not use the correct packaging materials, the machine could be damaged. Baby Lock is not liable for damage that occurs during return shipping.

Grounding



This product is for use on a nominal 120 V or nominal 220 V circuit, and has a grounding plug that looks like the plug illustrated in sketch A above. A temporary adapter, which looks like the adapter illustrated in sketches B and C, may be used to connect this plug to a 2-pole receptacle as shown in sketch B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green colored rigid ear, lug, and the like, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place by the metal screw.

IMPORTANT: In Canada, the use of a temporary adapter is not permitted by the Canadian Electric Code.

Pro-Stitcher Parts List for Baby Lock Crown Jewel

NOTE: The parts photographed in this manual may look different from the ones you received.

Item	Quantity	Photo
A. Blue X-axis Flexirack (10 feet)	1	
B. X-axis Flexirack clamps and screws	4	
C. 3/32-inch drill bit	1	

D. Emergency base-plate repair kit	1	
E. EZ Carriage	1	
F. Computer bracket	1	
G. Y-encoder circuit board	1	
H. Y-axis mounting bracket assembly	1	
I. Y power cord (10 foot)	1	
J. Adhesive cable mounting clips	4	
K. USB flash drive	1	
L. Art & Stitch software	1	
M. USB cable	1	
N. Computer power cord	1	

O. Manual engagement/disengagement tool	1	
P. Harness cable	1	
Q. Pro-Stitcher tablet computer	1	

NOTE: The model of the Pro-Stitcher computer may be different from the one pictured.

Installation

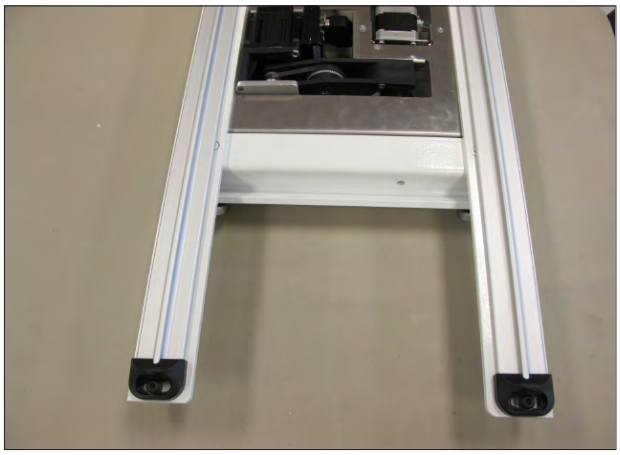
Tools required

- Power drill
- 4mm Allen wrench
- 5mm Allen wrench
- Slotted screwdriver (one large and one small)
- Phillips screwdriver (one large and one small)
- Manual engagement/disengagement tool (*see Parts List, item O*)

Installation of the X-Rack and Y-Rack

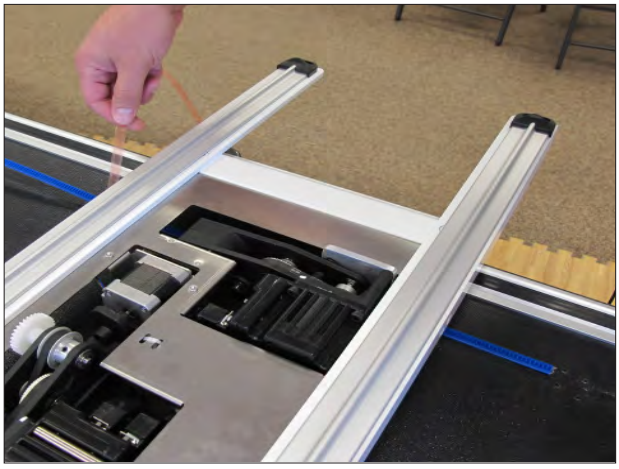
To install the X-Rack

1. Remove the blue 12-foot Flexirack (*see Parts List, item A*) and the Pro-Stitcher carriage (*see Parts List, item E*) from the box.

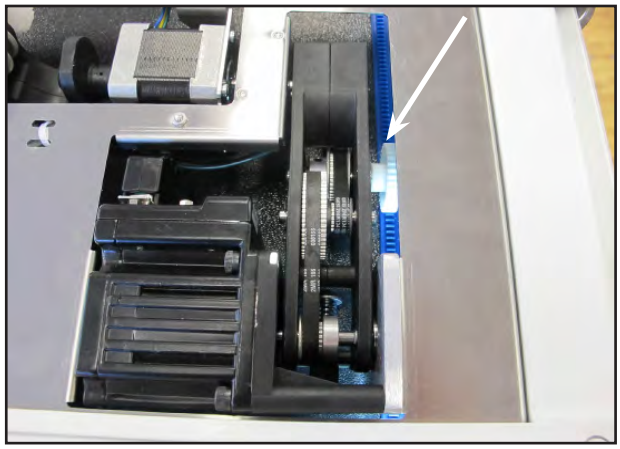


2. Place the Pro-Stitcher carriage on the frame. Starting at one end of the table, begin mounting the blue Flexirack to the front of the table while aligning it to the front white gear on the carriage.

   Peel back a few inches of the pink protective layer of the tape. Position the blue Flexirack by aligning it to the white gear as you move down the table. Press down on the blue Flexirack to stick it firmly to the table.



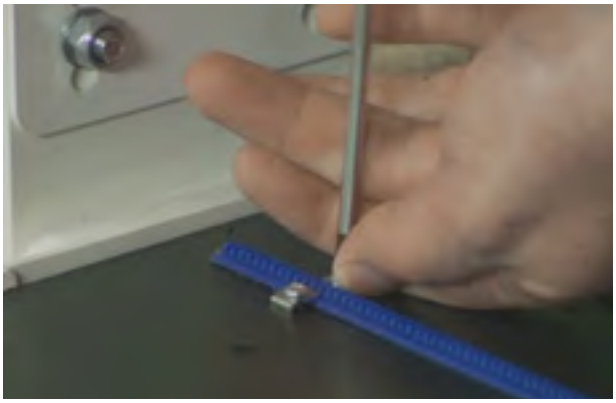
3. Use the carriage as a guide and align the blue Flexirack with the white gear along the length of the table (see arrow at right), removing the pink protective layer and pressing downward on the blue Flexirack while moving down the entire length of the table.

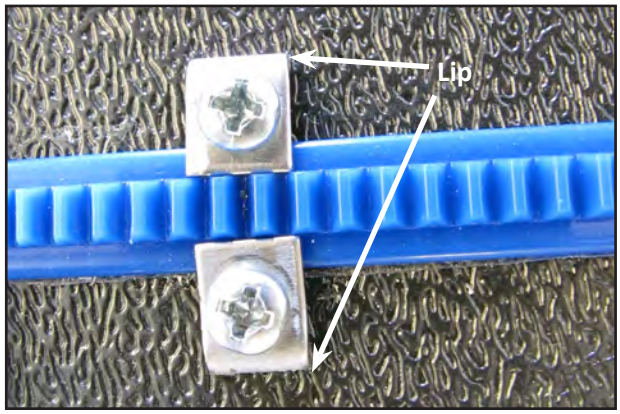


4. Double check the alignment of the carriage white gear with the blue Flexirack by rolling the carriage along the entire length of the table.

5. Trim the Flexirack to length using a knife or wire cutters. The blue Flexirack does not need to extend the full width of the table and can be a couple of inches shorter on either end.

6. At both ends of the blue Flexirack, use two of the small metal clamps (*see Parts List, item B*) to hold the ends firmly in place. The clamps have a hole through the center and a lip on one end. The lip should be on the side opposite the blue Flexirack. Place the clamps where they will be attached and drill pilot holes using the 3/32-inch drill bit and then use a Phillips screwdriver to fasten the clamps on both sides of the Flexirack to the table.





CAUTION: Do not use the larger drill bit included in the emergency repair kit, as this is the wrong size for the Flexirack clamps.

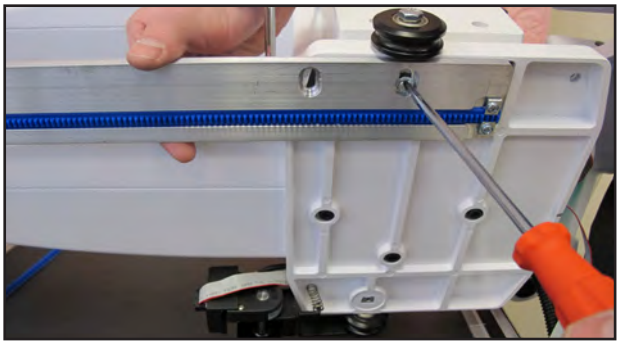
NOTE: As an alternative, use one clamp at each end. Slide the lip of the clamp over the last gear of the blue Flexirack, drill a pilot hole, and screw in place.

To install the Y-Rack

1. Carefully lay the quilting machine on its power pod side (the left side, looking from the front).

   Underneath the base plates, near the wheels on the C-pod side of the machine (the side with the thread tensioner and guides) there will be either two screws or two holes. If the screws are there, use a large flat screwdriver to remove the screws.

2. Attach the Y-Rack to the bottom of the front and rear base plates. The blue Flexirack should be toward the middle of the machine while the bolt holes should be toward the outside. Use the screws that were removed from the front and rear base plates (or use the two smallest screws in the Base Plate Repair Kit [*see Parts List, item D*] if your machine had no screws here).



CAUTION: Be careful not to over-tighten the screws as the base plate holes will strip easily. In case of accidentally cross-threading or stripping one of the base plate holes, an emergency repair kit (*see Parts List, item D*) has been provided.

3. If the screws in the base plates do not have slotted heads and a nut driver cannot be fitted over the screw head, use one of the provided slotted screws as a replacement (*see Parts List, item D*) and use a slotted screwdriver to tighten the screws in place.

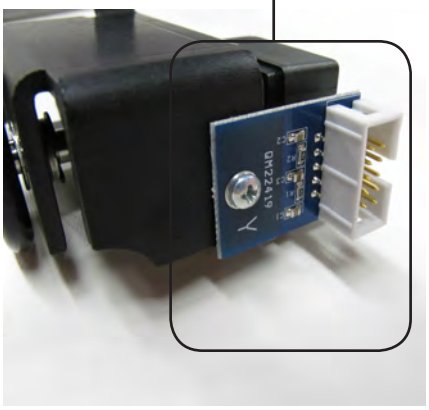
Y-encoder circuit board replacement

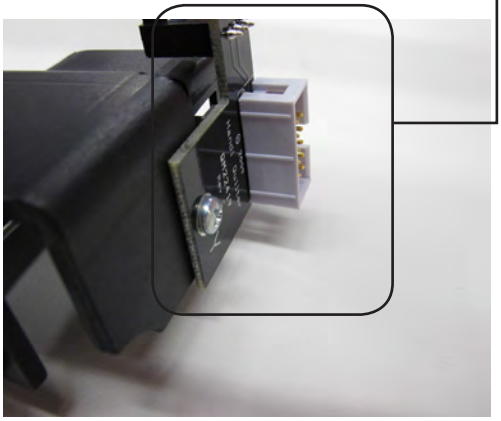
IMPORTANT: This step is required *only* if the circuit board on the Y-encoder is blue. If the Y-encoder has a black circuit board, skip ahead to the next step.

Replace the Y-encoder circuit board with the one in the package (*see Parts List, item G*) if the circuit board is blue and does not have a 3-pin connector attached. It is held in place with one screw and five connecting pins.

Replace this style Y-encoder circuit board.

This style Y-encoder circuit board does not need to be replaced.

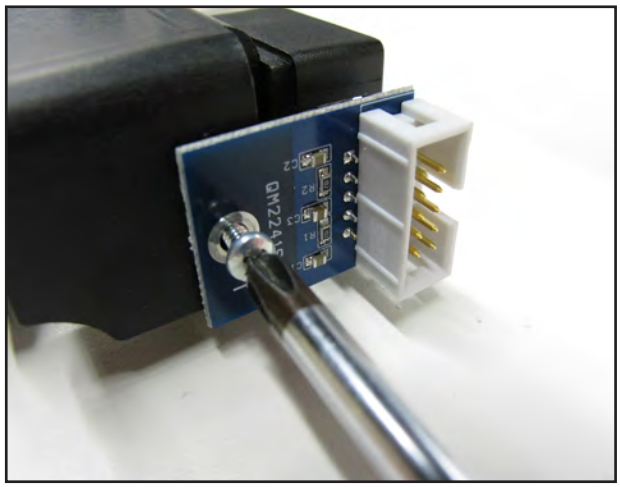




To replace the Y-encoder

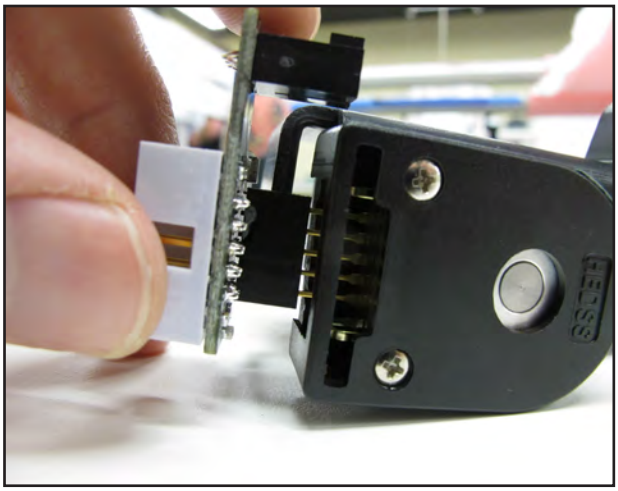
1. Unplug the stitch regulator cable from the Y-encoder.

2. Remove the screw that holds the circuit board in place with a small Phillips screwdriver.



3. Gently pull the circuit board outward toward the front of the quilting machine (the same direction the screw came out).

4. Align the new Y-Encoder circuit board so the five pins on the encoder fit into the five-pin connector on the circuit board and gently push into position. The screw hole on the circuit board should match up with the hole in the encoder housing.

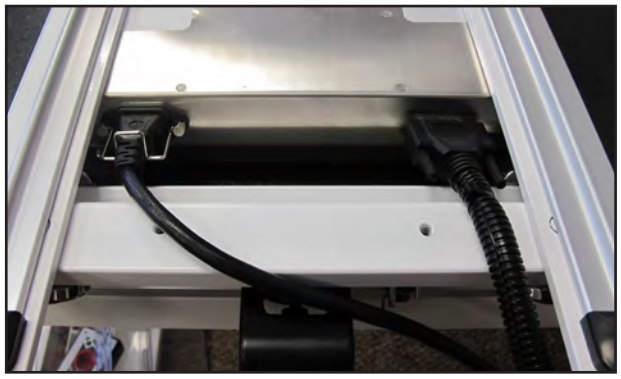


5. Replace the Phillips screw.

6. Plug the stitch regulator cable into the new Y-encoder circuit board.

To set up the Pro-Stitcher carriage

1. Place the Pro-Stitcher carriage on the frame system and untie the black twist ties that are binding the black cables in a loop. Drape the black cables over the back of the carriage.



2. Plug one branch of the Y-power cord *(see Parts List, item I)* into the power supply located toward the rear of the carriage. The other end of the power cord will be plugged into the quilting machine in step 6.

3. Attach one end of the harness cable (*see Parts List, item P*) into the connector on the right side of the power supply. Tighten the side screws. You will plug the other ends to the bracket as part of step 5 when you attach the tablet computer.

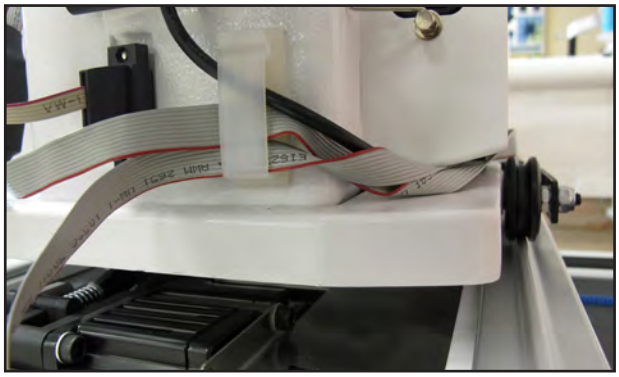
4. Carefully lift the quilting machine and place it on the carriage so the wheels engage the white carriage tracks, making sure not to set the wheels on top of the stitch regulator cable. This is easier to do with two people – one at each end of the quilting machine.

5. With one end of the stitch-regulator cable plugged into the machine's C-Pod (A below) and the middle connector plugged into the quilting machine's Y-encoder (B below), plug the other end of the cable into the carriage X-encoder (C at right).

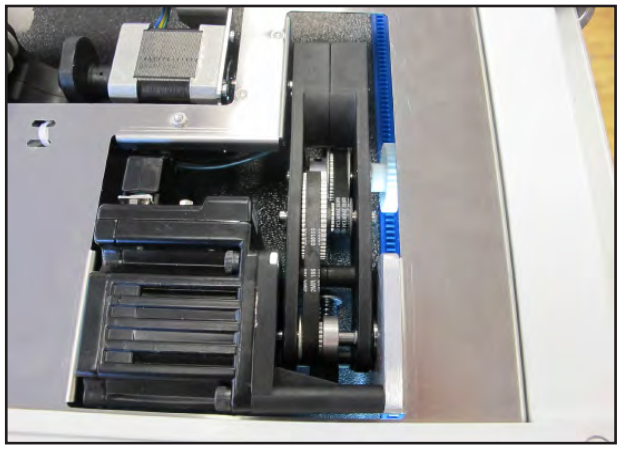
6. The black cables attached to the Pro-Stitcher carriage should be routed up between the rear handles and the quilting machine, toward the right-hand side of the machine (looking at the machine from the back). Attach the cable clips (*see Parts List, item J*) and route the cable accordingly. Plug the other end of the power cord into the back of the quilting machine.

7. If you haven't already done so, the small black cable with the black 3-connector clip should be routed underneath the P-Pod and snapped into the quilting machine's Y-encoder.

   The cables that run from the carriage up to the computer should be clipped into the cable clip under the rear handlebar to help prevent these cables from getting caught on the edges of the carriage.



8. Once again verify that the y-axis gear engages the blue Flexirack for the y-axis.



   - Do this by looking from the back of the machine between the bottom of the quilting machine and the top of the carriage. If necessary, use the manual engagement/disengagement tool to move the gears so they engage.

   - If horizontal adjustment is needed to ensure that at least half the white gear and blue Flexirack are interlocking, loosen the two screws that mount the y-axis bracket to the base plates and push the bracket in the direction necessary while retightening the screws.

IMPORTANT: If necessary, use the manual engagement/disengagement tool to move the gears so they engage. Insert the end of the tool into the hole at the front of the EZ Carriage.

9. With the power cable unplugged and the motors in the engaged position (use the manual engagement/disengagement tool if necessary), ensure that as the quilting machine is moved in both the X and the Y directions, the corresponding gears are rotating as well.

To attach the tablet computer

1. Disconnect the front handlebar cable from the side of the machine's head. Then remove the handlebars from the front of the quilting machine by removing the three hex-head bolts with a 5mm Allen wrench.

   If you're having difficulty reaching the front handlebar cable, first remove two of the hex-head bolts and loosen the third bolt. Then, rotate the handlebar slightly to provide easier access to the handlebar cable.

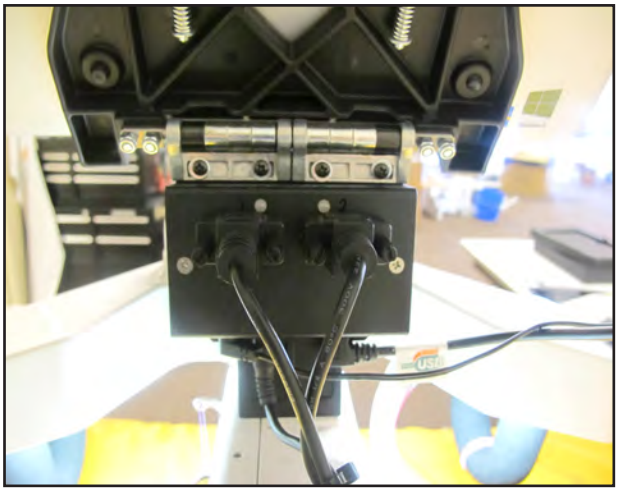
2. Make sure the three handlebar bolts are in the front handlebar and protruding out the bottom of the handlebar.

3. Position the handlebar over the computer bracket such that the screws go through the three holes in the bracket.

4. Secure the handlebar and bracket in place on the machine head using the three handlebar bolts.

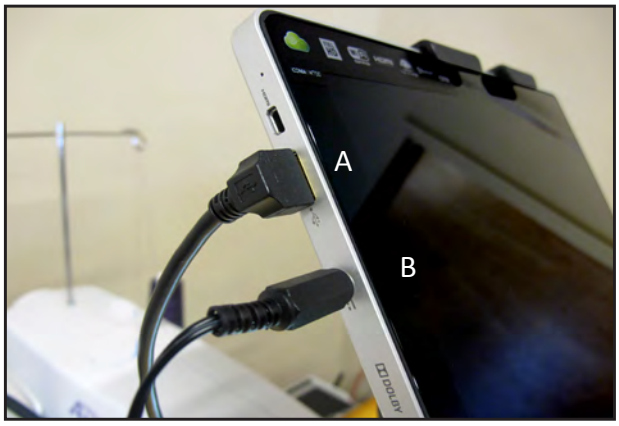
5. The black cable has three connections – two 9-pin serial connectors and one barrel connector for power.

Insert the barrel connector into the center jack located on the bottom edge of the black box that is mounted to the back of the computer bracket. Attach the two 9-pin serial cables to the appropriate ports on the back of the same box, making sure cable connectors are plugged into their corresponding ports on the black box.

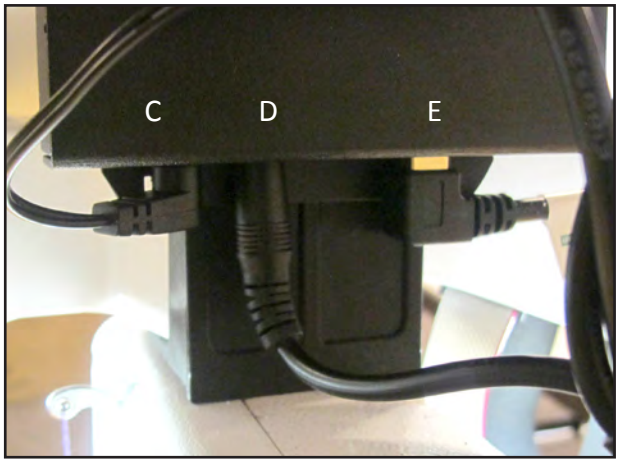


6. Remove the computer from its packaging. Install the computer into the computer bracket by sliding it into the black bracket from the side.

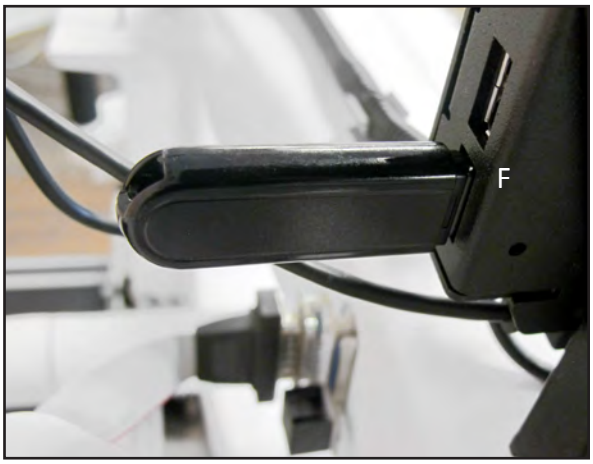
7. With the computer installed in the bracket, connect the USB short cable *(see Parts List, item M)* between the USB port, on the top-left side of the computer (position A) and the black box on the back of the bracket (position E).



8. Also connect the computer power cord *(see Parts List, item N)* between the computer (position B) and the black box (position C).



9. The open USB ports on the black box (position F) are for plugging in the USB Flash drive to load designs or update the software, or for plugging in a keyboard or mouse.



To turn on and shut down Pro-Stitcher

Check that the power cord is plugged into the power supply located at the back of the carriage. Then plug in the barrel-shaped power connector to the bottom of the black box behind the computer and the short power cord from the black box to the computer. If the cable is unplugged, the computer will continue to run on battery power until the charge has been used up.

To turn on Pro-Stitcher

- Press the power switch, usually located at the top-right side of the tablet computer.

To shut down Pro-Stitcher

- Choose **Shut Down** from the Pro-Stitcher menu. Then choose the **Shutdown** button at the bottom of the screen. This shuts down both the Pro-Stitcher software and the tablet computer.

IMPORTANT: If you don't see the Shutdown button, press the power switch on the tablet computer to continue shutting down the Pro-Stitcher computer.

IMPORTANT: If you leave the Pro-Stitcher computer powered on with the power cord unplugged, the computer will begin running off battery power. The computer will shut down when no battery power remains.

IMPORTANT: If the Pro-Stitcher computer is left on for a long period of time, the screen may turn black and enter a sleep mode. Tap the screen or press the Windows button below the screen to turn on the screen again. It may be necessary to drag a finger upward on the start-up screen to access Pro-Stitcher.

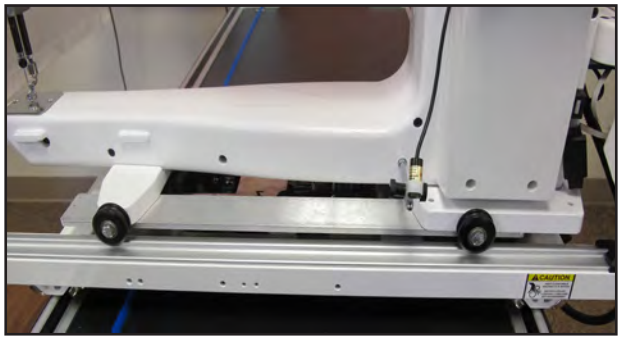
IMPORTANT: Disable the auto-rotate feature for your tablet computer so that it only works in landscape, or horizontal, mode. Depending on your computer, you will do this by pressing a button on the top or side of the tablet computer or by using the Microsoft Windows Control Panel Display options. Refer to the owner's manual that came with your tablet computer for more information.

Getting started with Pro-Stitcher

To move the quilting machine after the software has been loaded

- To move the quilting machine after the software has loaded, the motors should be disengaged. Press the **Disable Motors** button in the upper-right corner of the screen to disengage the motors. Note that the button changes to say Enable Motors.

If you have the EZ Carriage



Use the options on the Freehand screen to alternate between computerized quilting and free-motion quilting.

- Choose **Design**, then **Freehand**. Select the **Free Motion** button. Pro-Stitcher automatically raises the quick-release levers to disengage the carriage gears from the Flexirack. Select the **Engaged** button to once again use Pro-Stitcher for computerized quilting.

If you have a carriage with levers

IMPORTANT: If you have a carriage with levers, you will need to manually raise the levers for free-motion quilting and lower the levers for computerized quilting with Pro-Stitcher.

When the carriage levers are up (pictured), the carriage gears are disengaged from the Flexiracks. Do this for free-motion quilting.

Move the levers to the down position to use Pro-Stitcher.

To use the USB flash drive

- A USB flash drive is included with the Pro-Stitcher and is pre-loaded with more than 180 designs. These designs have also been loaded to the drive on the tablet computer, so the USB flash drive is the backup copy of the designs.

Plug the USB flash drive into one of the USB ports on the left side of the black box mounted behind the Pro-Stitcher computer.

IMPORTANT: It is not necessary to power down Pro-Stitcher to install or remove the USB flash drive, but take care not to remove the flash drive while the system is saving to or loading from the drive.

4. Pro-Stitcher® Overview

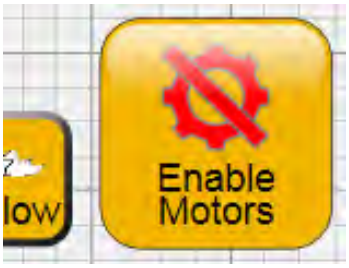
Pro-Stitcher runs on a touch screen computer with the Microsoft® Windows operating system. Because Pro-Stitcher runs in a Windows environment, you may notice things such as the Windows desktop. If you're unfamiliar with the Windows operating system or computers in general, you'll benefit by taking a class or finding other ways to learn more about the basics of Windows.

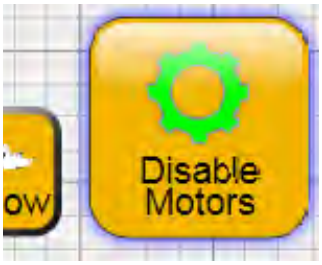
To maintain the integrity of the Pro-Stitcher software, it is best to avoid using the Pro-Stitcher computer as a typical desktop or tablet computer. Connecting to the Internet without the direction or tools provided by Baby Lock may result in Windows attempting to perform updates that could potentially be incompatible with the Pro-Stitcher software. It also may lead to unintentional exposure to viruses and other malware that may compromise the integrity of the Pro-Stitcher system or lead to other problems that may not be covered by the warranty.

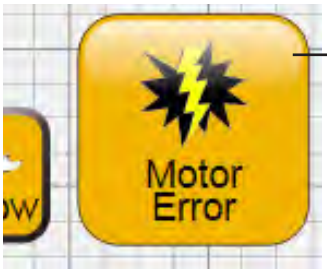
To get the most of your Pro-Stitcher system, Baby Lock recommends using the Pro-Stitcher computer only as directed to run the Pro-Stitcher software, the *Art & Stitch* software, and other software provided by or recommended by Baby Lock.

Enable or disable the carriage motors

Pro-Stitcher communicates with the quilting machine and the carriage motors.







Press to reestablish communications with the motors.

The Enable Motors button (top-right corner of the screen) enables you to switch between locking the motors in position and enabling the machine to be moved around. If this button becomes gray with a lightning bolt, Pro-Stitcher is not communicating with the carriage motors. Press the button to reestablish communications with the motors. Refer to the Troubleshooting section of this manual for further help.

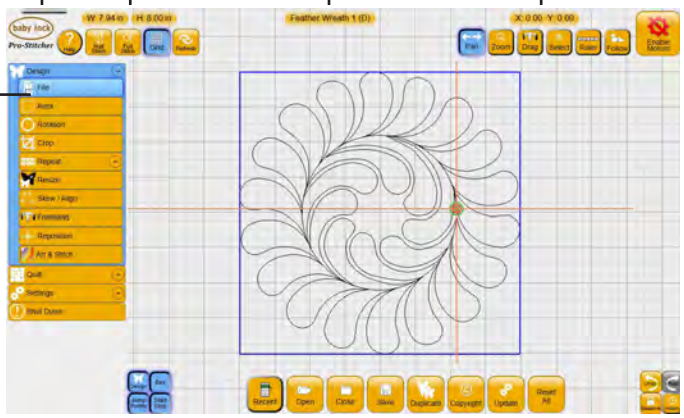
To enable or disable the carriage motors

- Press the **Enable Motors** button to lock the motors in position to keep the quilting machine from moving (as long as the levers on the carriage are engaged in the lower position at the same time).

- Press Disable Motors to disable the Pro-Stitcher motors.

Overview of the Pro-Stitcher screen

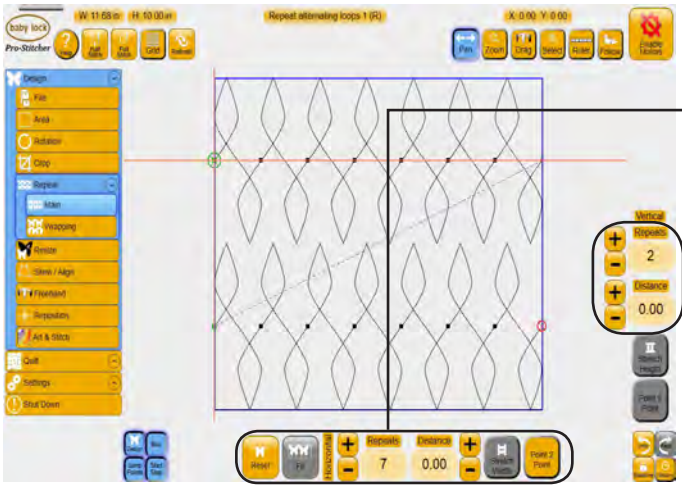
The Pro-Stitcher screen provides quick access to all functions.


Tap the gray bar to open the on-screen keyboard.
Design size in inches
Name of current design file
Position of the needle, or how far away from the Home position (x=0 and y=0) in the design
Press any menu heading to reveal the available functions.

Menu options

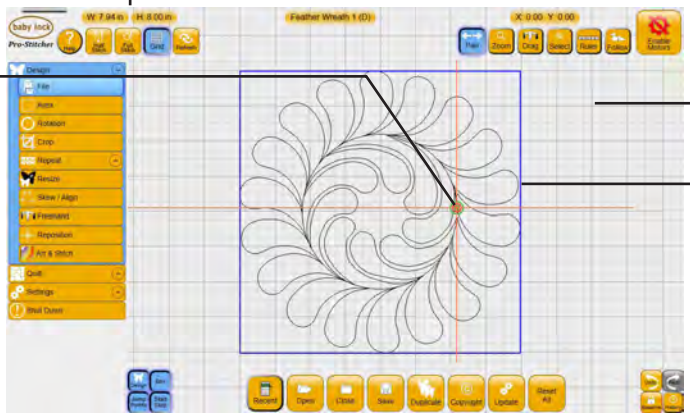
The left side of the screen shows the available menus: Design, Quilt, Settings, and Shut Down. The functions for these menu options are described later in this manual. At times there may be more functions available than can be displayed on the screen. To scroll through the functions, touch the function list and drag your finger upward to slide the list up and reveal what is at the bottom. Touch and drag downward to scroll back up to the top of the list.

Panel buttons


Select a main menu option to see options for that function.
Buttons appear at the bottom and right sides of the screen according to which function is selected.
Buttons for repeating designs horizontally
Buttons for repeating designs vertically

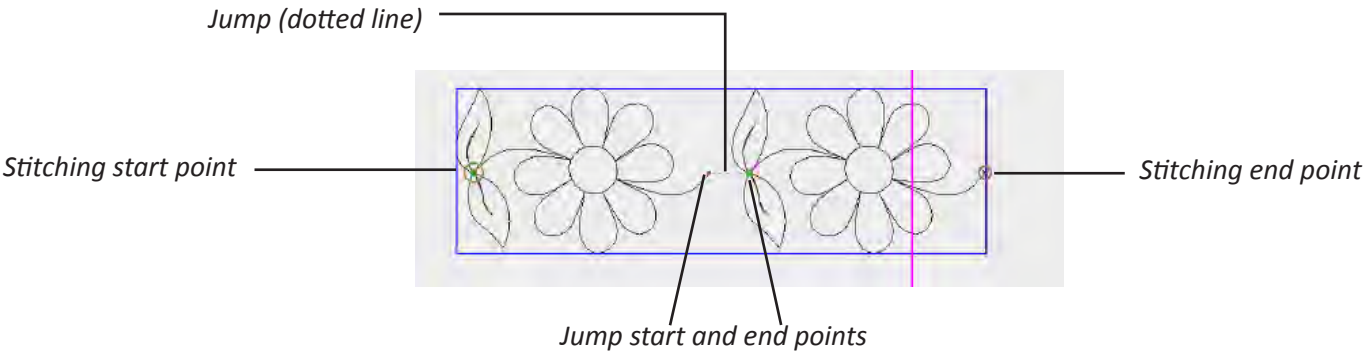
Work Area

The work area is the portion of the screen where you will load designs and work with them, in preparation for quilting.



The crosshairs represent the position of the quilting machine's needle relative to the current design and will move as the quilting machine is moved when the carriage is engaged. For more information about how to engage the carriage, see *Freehand Menu* in chapter 5, *Design Menu*.

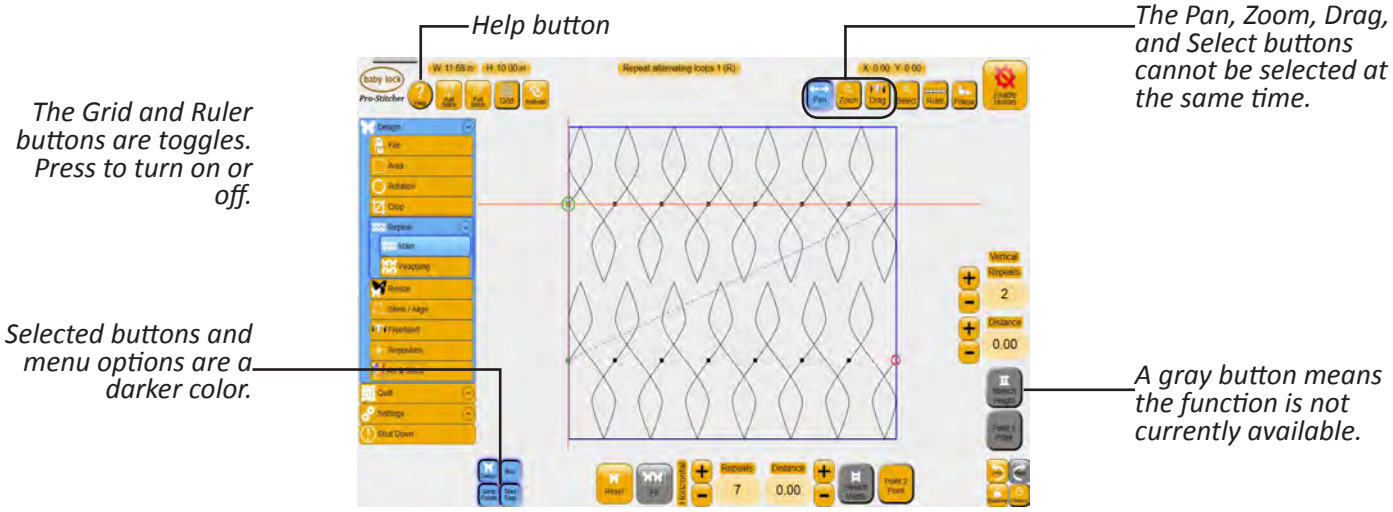
The size of the bounding box is the width and height of the widest and highest points of the current design.



A large green circle on the loaded design indicates the start point, a large red circle indicates the stop point, and the small green and red circles indicate the start and end points of jumps within the design. Purple dashed lines connect the small green and red circles to show the jumps, or no-stitch, lines.

Selected vs. non-selected buttons

Some buttons (such as Grid and Ruler) are on/off, or toggle, buttons. Turn them on or off by touching them. Other buttons are either/or buttons and are turned off by selecting another button with the opposite action (such as Pan and Drag).

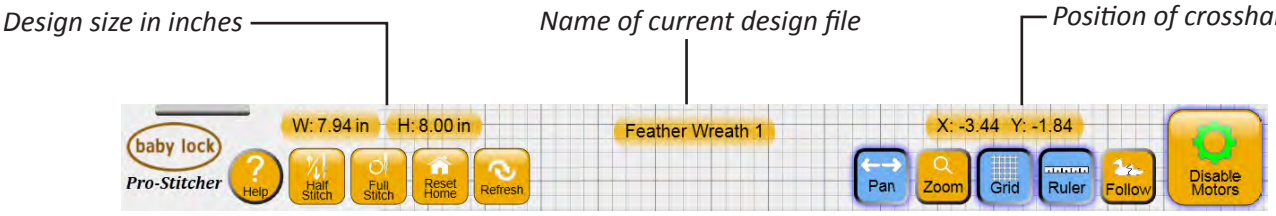

Help button
The Pan, Zoom, Drag, and Select buttons cannot be selected at the same time.
The Grid and Ruler buttons are toggles. Press to turn on or off.
Selected buttons and menu options are a darker color.
A gray button means the function is not currently available.

Gray Buttons

Depending on the menu or sub-menu item selected, there may be certain buttons that are grayed out. A gray button indicates that this function is not currently available. This typically happens because you have started a function that must be completed first or that the grayed-out function is not possible within the selected function.

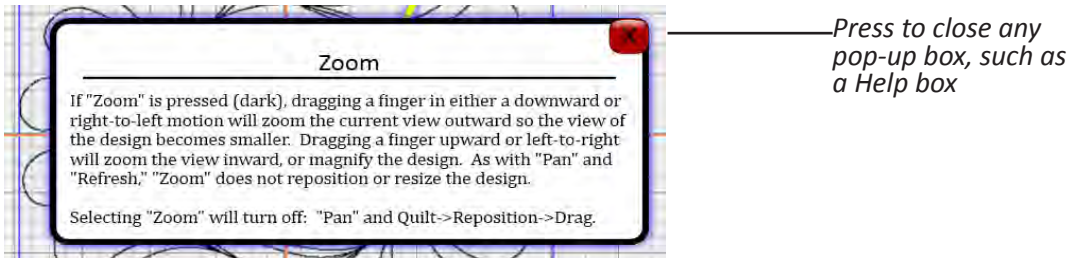
Top toolbar buttons

Commonly used functions are across the top of the screen for easy access. They are available regardless of which menu option you have chosen.



Also visible at the top of the screen are the name of the current design file, the size of the design, and the position of the crosshairs. A letter appears next to the name of the current design file to indicate what type of design it is: (D) indicates it is a design; (G) indicates it is a grouped design; and (R) indicates it is a repeated design.

To get on-screen help


Zoom
If "Zoom" is pressed (dark), dragging a finger in either a downward or right-to-left motion will zoom the current view outward so the view of the design becomes smaller. Dragging a finger upward or left-to-right will zoom the view inward, or magnify the design. As with "Pan" and "Refresh," "Zoom" does not reposition or resize the design.
Selecting "Zoom" will turn off: "Pan" and Quilt->Reposition->Drag.
Press to close any pop-up box, such as a Help box

- Press **Help** and then press the button or menu option for which you need help to display the Help pop-up box. Exit Help mode by pressing the **Help** button again or pressing the **Close** button (red X).

To cycle the needle up or down to form a half stitch

The Half Stitch button cycles the needle either to the up or the down position based on the current position of the needle.

- Tap **Half Stitch** once to cycle the needle a half stitch.

To cycle the needle to the up position

The Full Stitch button cycles the needle a full stitch to the up position. If the needle is in the down position, it will move only a half cycle so it stops in the up position. Subsequent presses of the button, however, will cycle a full stitch, always ending with the needle in the up position.

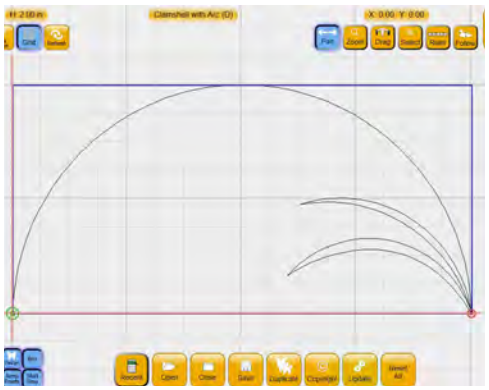
- Tap **Full Stitch** once to cycle the needle a full stitch.

To display the on-screen grid

- Press **Grid** to turn the grid on or off.

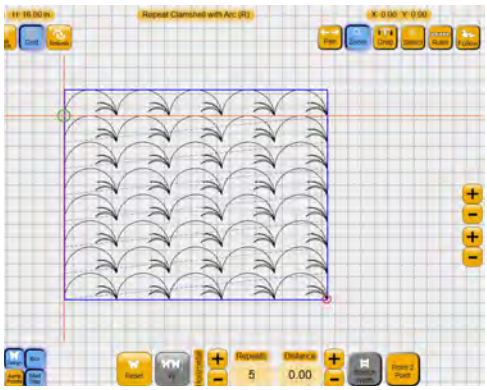
Depending on the zoom level, the lines may indicate either one-inch or one-quarter inch gradations.

Zoomed in



Darker lines show one-inch divisions and faded lines show one-quarter inch divisions.

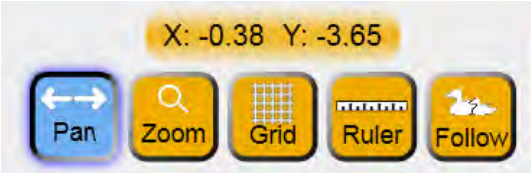
Zoomed out



Lines show one-inch divisions, but no quarter-inch divisions.

To quickly position the design and crosshairs on the screen

The Refresh button centers the design and crosshairs so both are visible on the screen. Refresh does not reposition the design relative to the quilt.



To move the on-screen view

Use Pan to move what you see on the work area. Pan does not reposition the design relative to the quilt.

- Select **Pan** and then drag your finger across the screen. The current view moves with the movement of your finger.

To view the design larger or smaller

Use Zoom to view the design larger or smaller. Zoom does not reposition or resize the design. If you have grid lines displayed on-screen, you'll see the grid lines also shrink or grow as you zoom the design.

- To shrink the view of the design, select **Zoom** and then drag your finger in a downward or right-to-left motion. To enlarge the view of the design, select **Zoom** and drag your finger in an upward or left-to-right motion.

To move the design on the screen

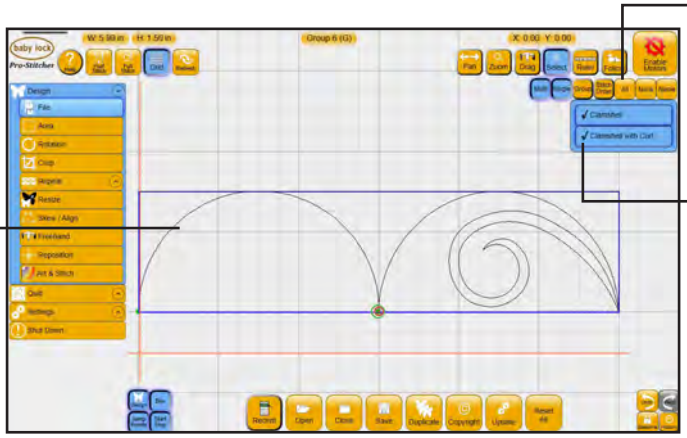
- Select the design and press **Drag**. After pressing Drag, the button changes to Drop. Touch the design with your finger and drag the design to a new location. Then press **Drop** when the design is in place.

- Alternately press **Drag** and move the quilting machine to move the design. Then press **Drop** when the design is in place.

To select one or more designs

- Press **Select** to select one or more design in the work area. A series of buttons appears for selecting one or more design.

After you select a design, its name appears at the top of the screen.



To select a single design

- Select **Single** to select one design at a time. Touch any design in the work area or choose the name of the design from the pop-up that appears.

Pro-Stitcher displays selected designs with black lines in the work area. Designs that aren't selected designs appear with gray lines.

To choose and group multiple designs

- Select **Multi** to select multiple designs. Then touch each design in the work area that you want to include in a grouped design. Then select **Group** to treat the selected designs as if they were a single design.

Pro-Stitcher gives the group a name and a number and displays the selected group in black with a bounding box around it. If you have created multiple groups, select the Group button and choose the group you want to work with from the pop-up box that appears.

If you Baseline a group, the designs are merged and the group is treated as a single design.

After creating a group, you will not be able to work with the designs individually. However, the following actions may be performed on a Group:

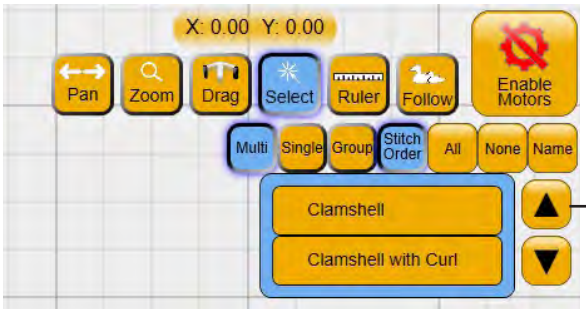
- Change the stitch order
- Give the group a name
- Perform actions such as Rotate, Align, Skew, and most other Design and Stitch menu options.

To name a group

- Select **Name** to enter a descriptive name for the group to replace the group number assigned by Pro-Stitcher. Use the keyboard that appears to enter a name and then select **OK** to save the name or **Cancel** to close the name box.

NOTE: If the keyboard opens on top of the box for entering the name, move it by touching the top area of the keyboard and dragging it to a new location on the screen. Close the on-screen keyboard or name box by touching the Close (X) button in the upper-right corner. Alternately you can drag the name box to a new area on the screen in the same way.

To change the stitch order of multiple designs



Choose one or more design and then touch the up or down arrow keys to change the order they will be stitched.

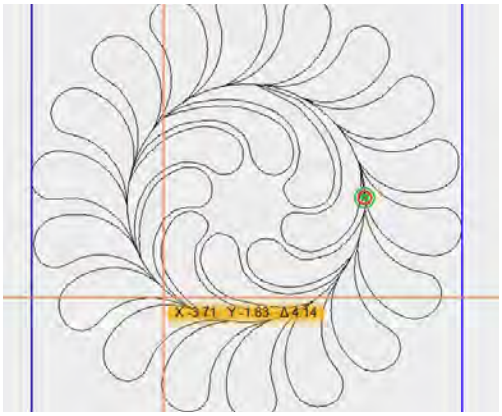
- Select **Stitch Order** to change the order in which the designs in the group are stitched. Choose one or more design and then touch the up and down arrows to shift the stitch order.

Jump lines between designs change as the stitch order changes.

To measure distances in a design or on the quilt

Use the Ruler to measure distances in a design or directly on the quilt.

1. Move the machine so the crosshairs, or the needle position, are at the starting point, or zero coordinate, of the section to be measured.



2. Press **Ruler** and move the machine to begin measuring. The ruler gives you the distance in the horizontal (x) and the vertical (y) directions, as well as the direct angular distance (represented by the triangle symbol).

3. Press **Ruler** again to turn off the ruler. To reset the ruler starting point, press **Ruler** to turn off the ruler and then turn it back on after you have moved the crosshairs to where you want to begin measuring.

Machine Quilting Tip: To measure a dimension longer than the available quilting space

Press **Ruler** and measure as far on the quilt as you can and mark where you ended with a pin. Enter the measurement into the calculator on your quilting machine. Press **Ruler** again to turn it off. Advance the quilt, making sure the pin is still visible. Press **Ruler** and measure the next segment, and use the calculator to add this measurement. Press **Ruler** to turn it off. Continue in this manner until you have the total measurement you need.

Crosshairs

The intersection of the horizontal and vertical crosshairs represent the position of the machine's needle. By default, the Follow button isn't selected and the crosshairs move when you move the machine. This means that the design remains stationary on the screen, but the crosshairs move.

If you select Follow, the crosshairs remain stationary in the middle of the display. As you move the machine, the design moves rather than the crosshairs.

Machine Quilting Tip: When to use Follow

Select **Follow** when you want to ensure that the crosshairs remain in view when you have zoomed a design. This saves you from having to use Pan to find the crosshairs. It is also helpful to enable Follow when you stitch a wide design because you can both zoom in on the design and always see what is being stitched on the screen.

Pro-Stitcher automatically turns off Follow after you select a new design.

5. Design Menu

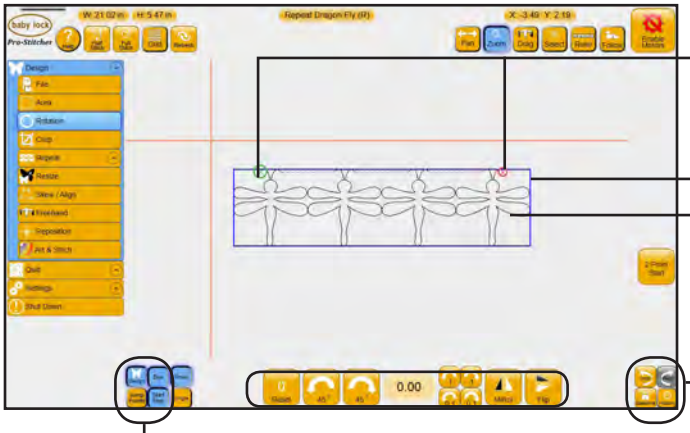
The Design menu functions open, modify, position, and save quilting designs. Much of what you will do with Pro-Stitcher will be from this menu.

After you select Design, two clusters of buttons appear in the lower-left and lower-right corners of the screen.

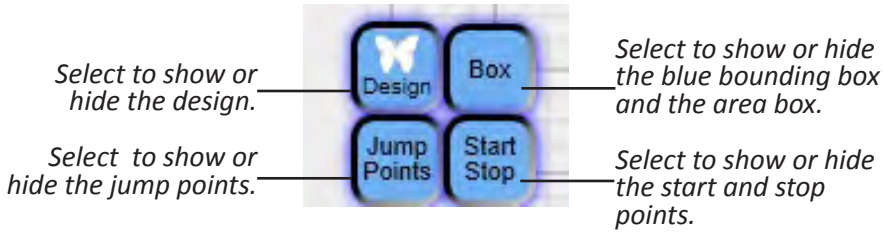
Red dots mark the start of a jump, the point where Pro-Stitcher stops stitching so you can tie off the thread.

The purple dashed line shows the jumps (not stitched).

Green dots mark the end of the jump and the beginning of the next stitching segment.



The four buttons in the lower-left corner of the Design screens turn on or off the display of a portion of the design.



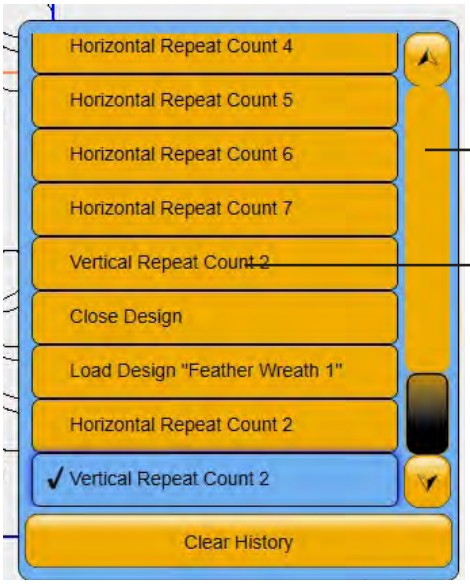
The four buttons in the lower-right corner of the Design screen help to keep track of changes made to the design.

Select to undo the last function performed.
Undo
Redo
Select to redo the last function that was undone.
Select to baseline a design, or have the software treat it as a new design.
Baseline
History
Select to see a list of the functions that have been performed since opening a design.

Design history

- Press **History** to show a list of the functions that have been performed since opening a design.

The item at the top of the list is the first function performed and the item at the bottom of the list is the most recent function.



Use your finger to drag the list up or down to reveal more of the history.

Press any of the history items to return the design to the state it was when that function was performed.

To clear the history of recent functions

- To clear the history of recent actions, select **Clear History**.

After clearing the history, the history is gone and you will not be able to Undo or Redo previous actions. As you perform new actions, they are added to the history and the Undo and Redo buttons will work on those actions.

Baseline

Pro-Stitcher has very flexible design capabilities. Each function you choose is reprocessed and reapplied when the next function is performed. For example, you can skew a design to fit an area and then rotate the skewed design. The design continues to skew as it rotates to keep it within the area.

The baseline feature enables you to freeze the design at any point in the design process, essentially freezing all of your design choices. The design isn't saved to the computer, but the resize, rotation, and crop settings are maintained until you change them.

To baseline a design

- At any point in the design process, select **Baseline**.

After you baseline a design, you will not be able to use any of the design reset buttons to return the design to its original settings. However, you will be able to use the Undo or Redo functions based on the design history.

After you baseline a group, the designs are merged and the group is treated as a single design. You will not be able to work with the designs individually.

Machine Quilting Tip: Practical uses for Baseline

Use the Baseline function to stitch a quilt with multiple, identical blocks. Mark the area of the first block, fit the design to the block using Skew or other functions to modify the design, and then baseline the design. Quilt the block. Clear the Area. The design will maintain its size and shape. Reposition the design to another block and quilt the design. Continue quilting the baselined design on the blocks throughout the quilt.

Use Baseline when you want to crop multiple shapes from a design. Mark and crop the first area, and then select Baseline. Clear the area and create a new area in another location for cropping. Continue to mark and crop as desired, followed by selecting Baseline after each crop to create multiple cropped regions in a design.

To work with design files

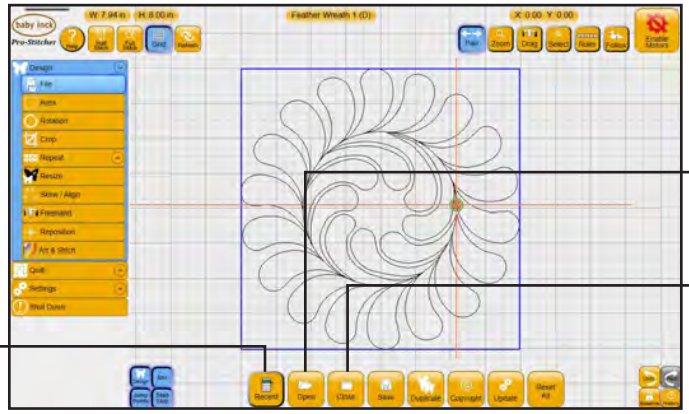
Pro-Stitcher reads five file types: .hqf, .hqp, .qli, .txt, and .tap. Pro-Stitcher cannot read encrypted files or .txt files that were created for computerized quilting systems with proprietary formats.

Open, close, save, and duplicate design files

To access recently used designs

- Choose **Recent** to see a list of the most recent designs you have opened. Then select the design you want to use.

This shortcut enables you to open recent designs without searching through the design library.

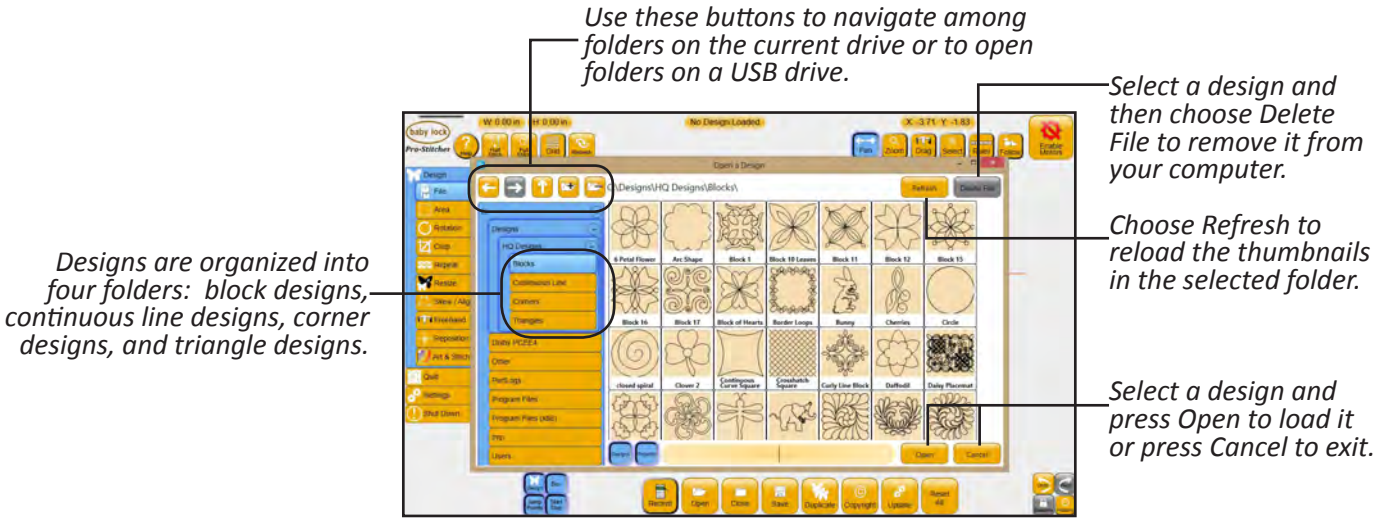

Press Open to see the library of quilting designs.
Press Close to close the selected design.
Press Recent to show the most recent designs you've opened.

To load a design from the design library

1. To load a design, select **Design**, **File**, and then select **Open**.

2. Browse to the design stored either on the C: drive or on a USB drive. The different design file types have color-coded backgrounds as follows:

    - *.hqf: beige
    - *.hqp: purple
    - *.qli: light blue
    - *.txt: lavender
    - *.tap: pink


Use these buttons to navigate among folders on the current drive or to open folders on a USB drive.
Select a design and then choose Delete File to remove it from your computer.
Choose Refresh to reload the thumbnails in the selected folder.
Designs are organized into four folders: block designs, continuous line designs, corner designs, and triangle designs.
Select a design and press Open to load it or press Cancel to exit.

Loading the thumbnails may take a few moments, depending on how many designs are stored in the selected folder and how intricate those designs are. While the thumbnails load, a colored block with the name of the file type will be visible in place of the actual design thumbnail.

3. Double-tap the name of the desired file or single tap and then press **Open** to load the design. A prompt to Clear Area appears on-screen. Choose **Yes** to clear any area you have defined or **No** to leave the area as designated.

To save a design

Pro-Stitcher prompts you to save your work when closing the software or closing a design. However, it is a good idea to save your work regularly.

- Press **Save** to save the design in its current state. The design library appears with the name of the current design loaded.
  - To overwrite the existing design with that name, press **Save**.
  - To save a copy of the design to a new name, enter a new name using the pop-up keyboard and then press **Save**.
  - To cancel without saving the design, press **Cancel**.

To save a group as a design or a project

You can save a group of designs as a design or as a project. If you save a group as a design, Pro-Stitcher creates a single design. When you load it again in the future, you will not be able to work with the designs independently.

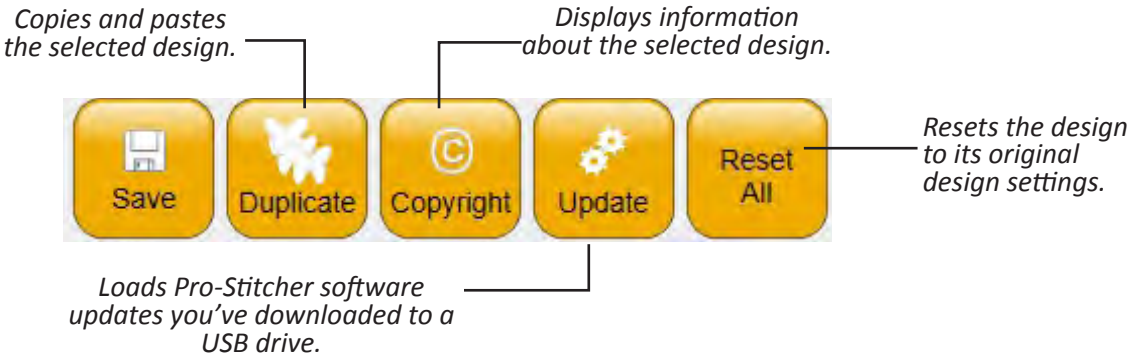
- To save a group as a design, select the group, select **Save** and then select Design before giving it a filename and saving.

If you save a group of designs as a project, Pro-Stitcher saves each design independently so that when you load the project again, you will be able to modify the designs individually.

- To save a group as a Project, select the group, select **Save** and then select **Projects**. Give the group a file name and select **Save** on the Save Project screen.

To save designs or projects to a new folder

- To save the design or project to a new folder, browse to the desired folder using the folder tabs on the left side of the design library. Alternatively, use the navigation buttons at the top of the screen to move among folders and drives.


Copies and pastes the selected design.
Displays information about the selected design.
Save
Duplicate
Copyright
Update
Reset All
Resets the design to its original design settings.
Loads Pro-Stitcher software updates you've downloaded to a USB drive.

To duplicate a design

- Select the design or group you want to copy and choose **Duplicate**.

The duplicated design is placed at the current position of the crosshairs. If the crosshairs have not been moved, the duplicate(s) will be in exactly the same place as the original. Choose Reposition or Drag to move the duplicated design to a different location in the work area. Alternately, select the design or group and drag it to a new position on the screen.

To view design information

Many designers include copyright information and instructions on how to use their designs within the design file itself.

- To view design information, load the design file and press **Copyright**. A pop-up window displays the information contained within the design file related to copyrights and user instructions.

To load a Pro-Stitcher software update

As updates for the Pro-Stitcher software become available, download the update file from the Baby Lock website, www.babylock.com.

- Select the **Upgrades/Updates** link at the top of the page. Then select **Pro-Stitcher Software Update**.

Follow the instructions for downloading the latest update, save the update file to a USB flash drive, and plug the USB flash drive into a USB port on the Pro-Stitcher computer. Wait for approximately 10 seconds while Pro-Stitcher accesses the USB flash drive. Follow the instructions included on the website for installing the update.

To return a design to its original settings

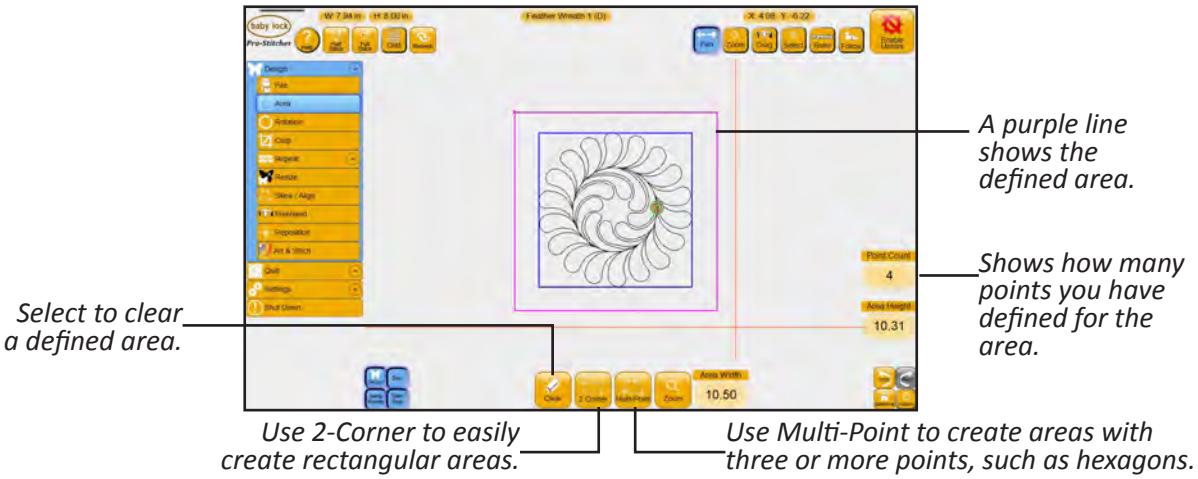
Many settings in Pro-Stitcher remain set even after other operations are performed. For example, you might rotate a design, repeat it multiple times, resize it, and more.

- To turn off design changes you've made since the last baseline, press **Reset All**.

If a new design is loaded or you baseline the design, Reset All is automatically performed.

Create and use areas

A quilting area is a portion of the Pro-Stitcher screen that represents an area on the quilt. Within this area, you can place designs, repeat them, stretch them, skew them, crop them, and so forth, knowing that everything within the defined area on the screen will match up with the corresponding area on the quilt.


A purple line shows the defined area.
Shows how many points you have defined for the area.
Select to clear a defined area.
Use 2-Corner to easily create rectangular areas.
Use Multi-Point to create areas with three or more points, such as hexagons.
4
10.31
10.50

Create an area at any point during the design process. You can create only one area at a time.

To clear an area

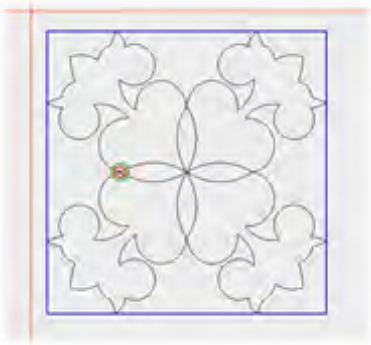
- Select **Area** on the menu, then select **Clear**.

Areas can be a simple rectangle, created by identifying two opposing corners (2-corner areas), or they can be more complex, unique shapes, created by plotting multiple points (multi-point areas). The area is fixed in position once it is defined and cannot be moved.

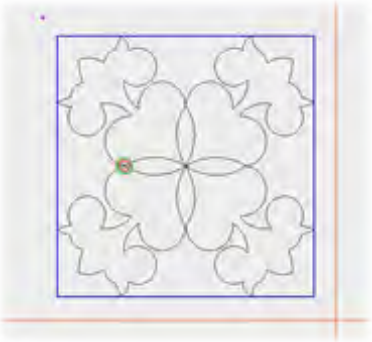
To move or adjust an area, first clear the current area and then recreate it. To fit the area within the work area of the screen, use Zoom.

To create a rectangular area using 2 Corner

1. Move the quilting machine so the needle lines up with one corner of the desired area on the quilt. (It may be necessary to press the **Disable Motors** button at the top-right corner of the screen.) Then press **2-Corner.**

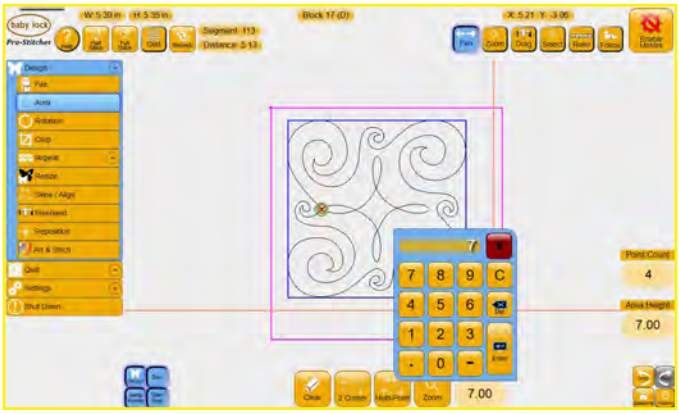


2. A purple dot displays on the screen to indicate the first corner. Move the quilting machine so the needle lines up with the opposite corner of the desired area on the quilt.



3. Select **2-Corner** again. A purple rectangle indicates the quilting area.

To override the width or height of an area



The width and height of the area appear in the number boxes on the screen. You can modify these values to create an area beyond what the quilting machine can reach.

- Touch either the **Area Width** number box or the **Area Height** number box, enter a new value in the number pad that appears, and then press **Enter**. After you enter a value in either box, the area converts to a rectangle with the new dimension(s).

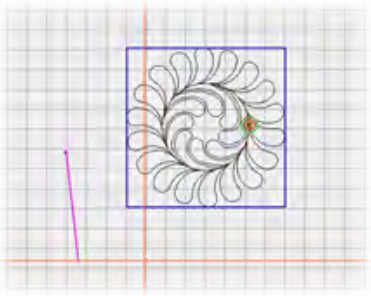
Multi-Point

For more complex areas, use Multi-Point to mark multiple points to create triangles, hexagons, octagons, or any shape with three or more points.

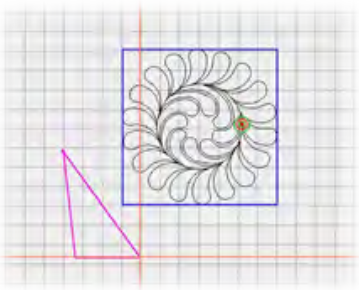
To create an area with multiple points

1. Move the quilting machine so the needle lines up with one corner of the desired area on the quilt. It may be necessary to press the Disable Motors button at the top-right corner of the screen. Press **Multi-Point**.

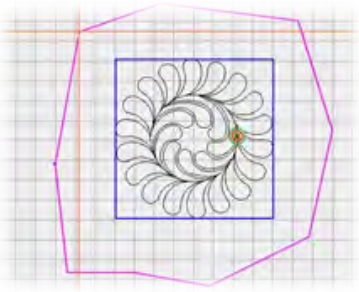
2. Move the machine to a second point along the perimeter of the quilting area and press **Multi-Point** again. A purple line joins the two marked points.



3. Move the machine to a third point along the perimeter of the quilting area and press **Multi-Point**. Pro-Stitcher automatically closes the shape back to the first point when the third point is marked, creating a purple triangle to indicate the multi-point area.



4. Mark other points as desired to create a detailed quilting area.

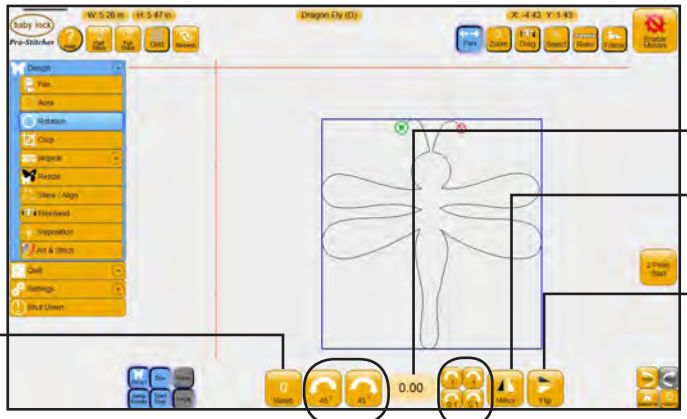


To keep track of how many points you have marked

- The Point Count box displays how many points you have marked. When you clear the area, the point count goes back to zero.

Rotate designs

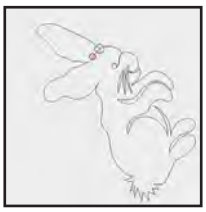
- Select **Design** and then **Rotate** to see the options for rotating designs.


Number box
Flips the design vertically.
Flips the design horizontally.
Resets the rotation back to zero.
Rotates the design 45° clockwise or counterclockwise.
Rotates the design 1° or 0.1° clockwise or counterclockwise.

Original design

Design rotated 45° clockwise

Design rotated 45° counterclockwise



Design mirrored

Design flipped

In addition to using the rotation buttons, press the number box and enter a rotation value on the number pad. Enter a positive number to rotate the design clockwise or a negative number to rate the design counterclockwise.

2-Point Rotation

2-Point Rotation uses the quilting machine to identify a line that represents the rotation angle. You'll set a start point and an end point to create a line that represents the angle to which the design will align.

To rotate a design according to an angle on the quilt

1. Move the quilting machine to a point on the quilt left of the line to follow and press **2 Point Start**. Note the position of the crosshairs in the image at the right.

2. Move the machine to a point further to the right along the angled line. Note the position of the crosshairs in the image at the right.

3. Select 2 Point End. The design rotated to match the angle created by the two points selected in steps 1 and 2

The rotation angle appears in the number box and the design rotates to match the angle, 44.17 degrees in this example.

Machine Quilting Tip: Use 2-Point rotation to quilt sashing in an on-point quilt

Create an area that represents the sashing to be quilted. Load the design and make design changes, such as resize and create repeats. The design will be horizontal on the screen. Then use 2-Point rotation to rotate the design to match the quilt. Position the machine's needle along the angled sashing seam line and select 2-Point Start. Move the machine's needle to a spot along the same seam line and select 2-Point End. The design rotates to match the angle you defined.

To fine tune the angle of rotation

- Redefine either the start point or the end point as necessary by moving the quilting machine to a new location and pressing either **2 Point Start** or **2 Point End,** depending on which end of the line needs to be repositioned.

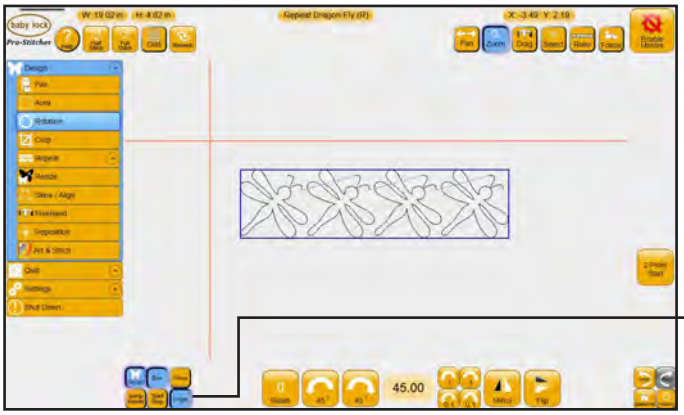
NOTE: A start point on the left followed by an end point on the right (i.e. a straight line with start on the left and end on the right) is a 0° rotation, or no rotation. A start point on the right and an end point on the left (i.e. a straight same line, but with the start and end points reversed) is a 180° rotation, or in other words, the design will be upside down.

Rotation of repeated designs

Repeated designs can be rotated individually or treated as a single design and rotated as a set.

To rotate repeated designs individually

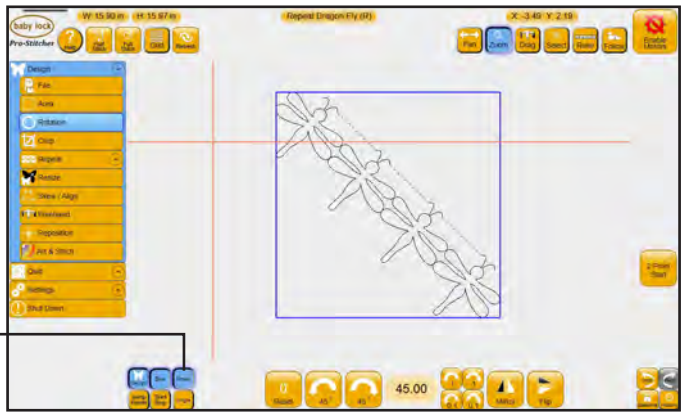
- Before rotating, select **Single**. Then select one of the rotate buttons. Each individual design will be rotated (or mirrored or flipped).



Rotates repeated designs individually.

To rotate repeated designs as a group

- Before rotating, select **Group**. Then select one of the rotate buttons. The entire set of repeated designs is rotated (or mirrored or flipped) as a single entity.



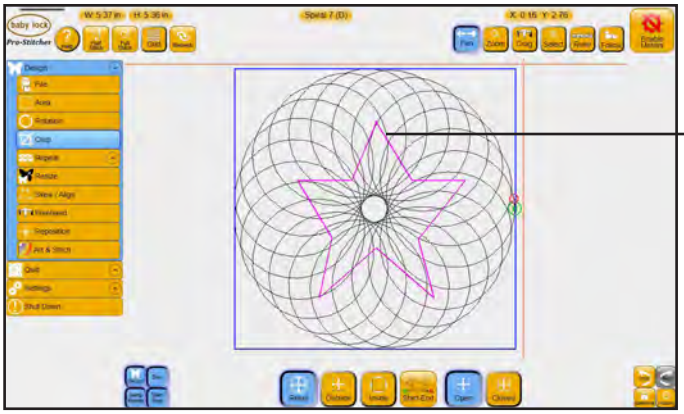
Rotates repeated designs as a set.

Crop Menu

Use Crop menu functions in conjunction with areas. After modifying a design as needed, mark an area that represents the region to be cropped.

- Select **Design** and then **Crop**.

NOTE: If the Crop panel buttons at the bottom of the screen are grayed out, an area hasn't yet been defined. Define the area to be cropped before using any of the Crop functions.



Purple lines show the star-shaped multi-point area.

Treatment of loose ends

Pro-Stitcher has two ways of handling loose ends, or jump points, that are created from a crop: Open or Closed.

To perform a tieoff at jump points

- Choose **Open** to perform a tieoff at the jump points in a cropped design. Select **Tie Off Start** and **Tie Off Finish** in Settings. For more information about the tieoff settings, see *Control how Pro-Stitcher performs tie-offs* in chapter 8, *Settings Menu*.

To stitch between jump points

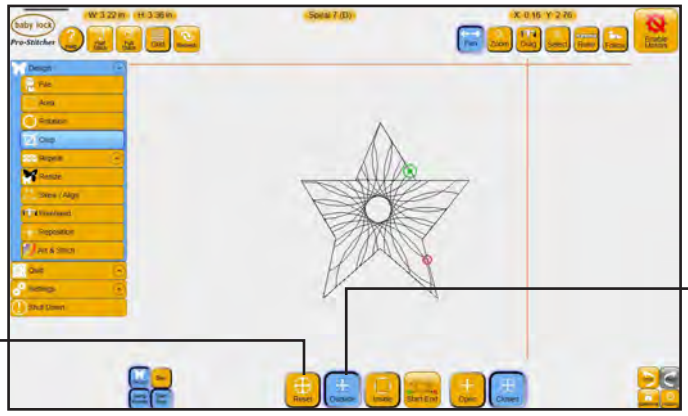
- Choose **Closed** to stitch along the border of the cropped area between jump points in a cropped design.

Machine Quilting Tip: To stitch around the cropped area

The Closed option may not stitch the entire area outline. Consider using Trace Outline to stitch around the perimeter of the area.

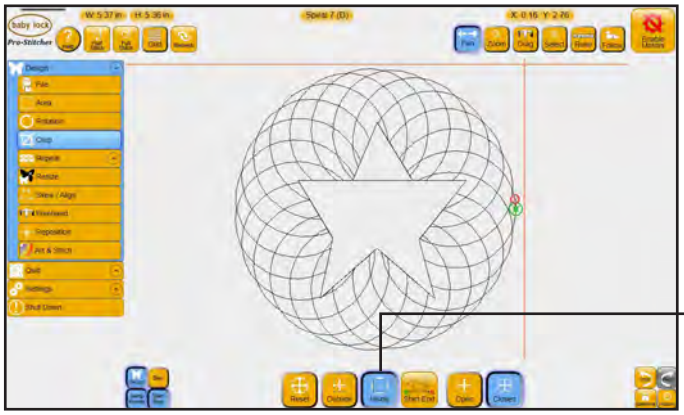
Crop designs based on areas or start and end points

To crop everything outside the defined area



- Select **Outside** to crop away everything outside the defined Area and keep everything within that Area.

To crop everything inside the defined area



- Select **Inside** to crop away everything inside the defined area and keep everything outside the area.

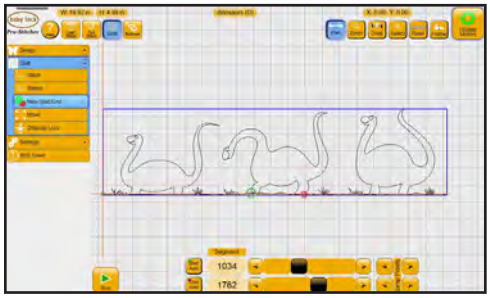
To isolate and crop a portion of a design

Use Crop Start-End in conjunction with New Start/End points (on the Quilt menu) to isolate a part of a design for quilting. Pro-Stitcher crops any of the design before the start point and after the end point.

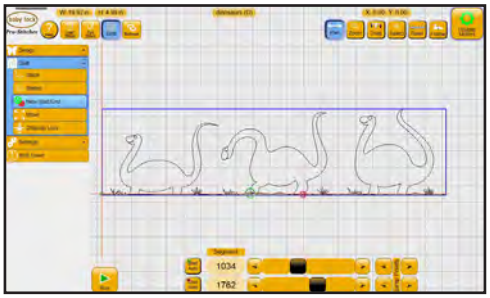
1. Load a design, such as the continuous bunny and stars e2e.hqf design.

2. Select **Quilt** and then **New Start/End**.

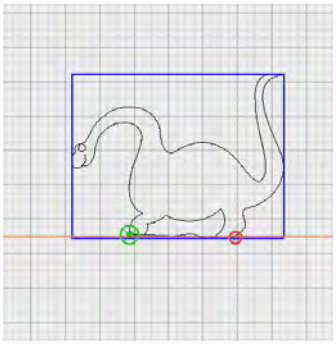
3. Use the slider bars and arrows to change the start and end points.



4. Select **Design** and then **Crop**.



5. Select **Start-End** to crop away the design before the start point and after the end point. Save the design to a new file name so you can use it again in the future.



Repeat Menu

The Repeat Main function provides several options for repeating a design.

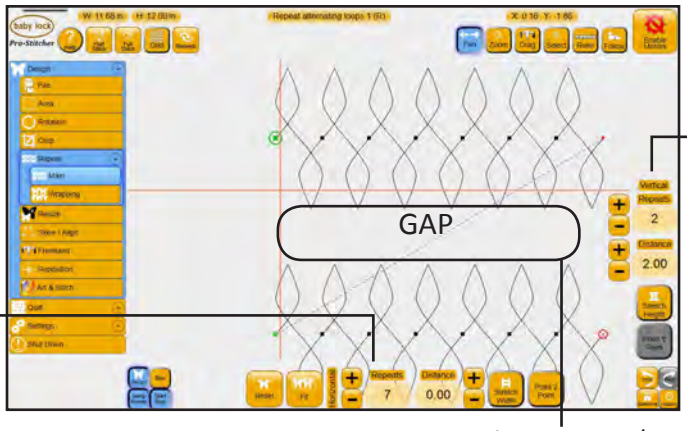
- Select **Design**, **Repeat**, and then **Main**.

The Repeat Wrapping function provides several options for wrapping, or offsetting, designs. Most of these options can be done with or without a defined area.

- Select **Design**, **Repeat**, and then **Wrapping**.

Using a defined area in conjunction with the Repeat options will stretch, skew, or fit the desired number of repeats within that area. If an area has not been defined, the options to stretch and fit will be disabled because they require an area to stretch or fit to.

Repeat Main



Horizontal repeat options: Enter the number of repeats, or press the Plus Sign to increase the number of repeats or the Minus Sign to decrease the number of repeats.

Vertical repeat options: Enter the number of repeats, or press the Plus Sign to increase the number of repeats or the Minus Sign to decrease the number of repeats.

Increase or decrease the size of the gap between repeated designs with the Distance boxes.

To repeat a design

- Press the **Plus Sign** (+) to increase the number of times you want to repeat a design. To decrease the number of repeats that appear on-screen, press the **Minus Sign** (–).

- Alternately, tap on the number box and enter the desired number of repeats into the pop-up number box. Then press **Enter**.

NOTE: If the repeated design includes jump points, Pro-Stitcher preserves them when you save the design.

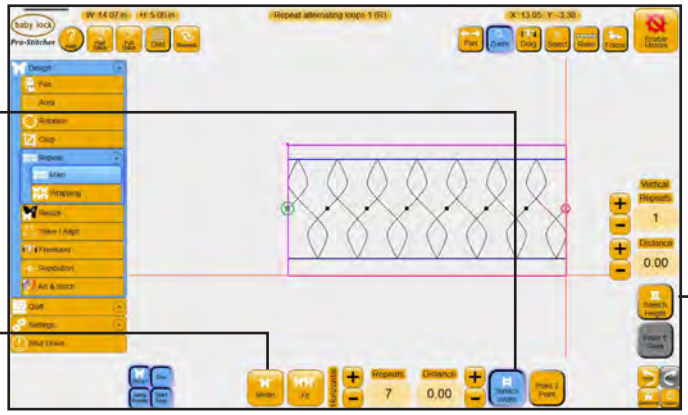
To change the size of the gap between repeated designs

- Enter a value (in inches) in either the Horizontal Distance box or the Vertical Distance box to increase the size of the gap between repeated designs. To overlap the designs, enter a negative value.

To stretch a design to fill an area

You can stretch a design to fit either the width or the height of an area.

- First define an area and then choose either the **Stretch Width** or the **Stretch Height** button.

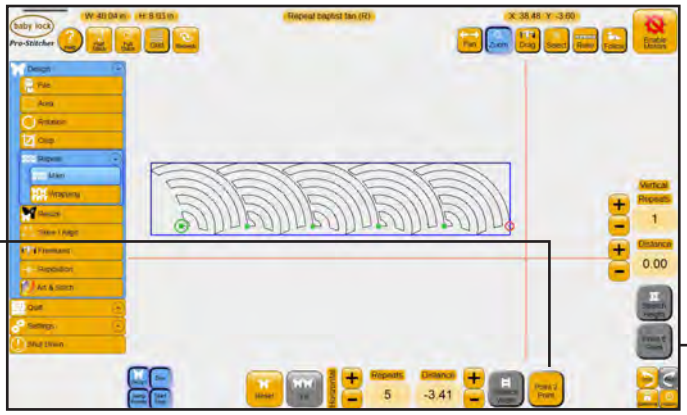

Stretches the design to fit the width of the area.
Calculates the optimal number of repeats both vertically and horizontally.
Stretches the design to fit the height of the area.

To calculate the optimal number of repeats for an area

- Press **Fit** to have Pro-Stitcher calculate the optimal number of repeats in both height and width. You can add more horizontal or vertical repeats as desired and then select **Stretch Width** and **Stretch Height** to fit them to the area.

Point 2 Point

Some designs are intended to be linked together horizontally or vertically but must be overlapped for the start and end points to match up. The Point 2 Point buttons link the start and end points of repeated designs. The following image shows the design before selecting Point 2 Point. (better screen shot)

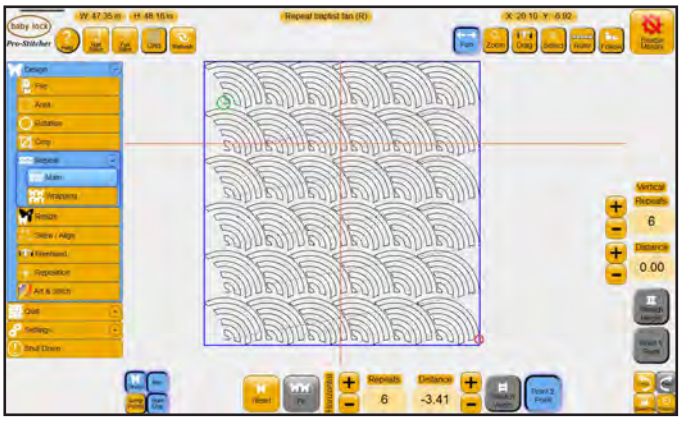

Aligns horizontally repeated designs such that the end point of the first design matches up with the start point of the next design.
Aligns vertically repeated designs such that the end point of the first design matches up with the start point of the next design.

To join horizontally repeated designs

- To link designs horizontally, ensure the start and end points are at the same height, or vertical coordinate. Then select **Horizontal Point 2 Point** to align the designs such that the end point of the first design matches up with the start point of the next design.

To join vertically repeated designs

Repeated Baptist Fan design has been joined vertically and horizontally with Point 2 Point.



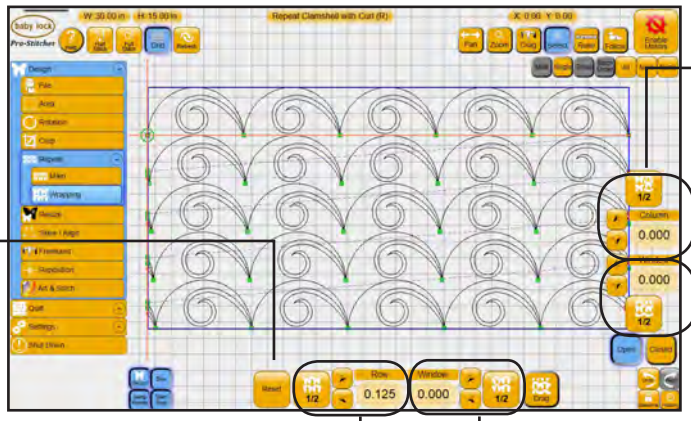
- To link designs vertically, ensure the start and end points are at the same horizontal coordinate. Then select **Vertical Point 2 Point** to align the designs such that the end point of the first design matches up with the start point of the next design.

NOTE: To manually enter a distance value between the designs in either the horizontal or vertical distance box, you must first turn off Point 2 Point.

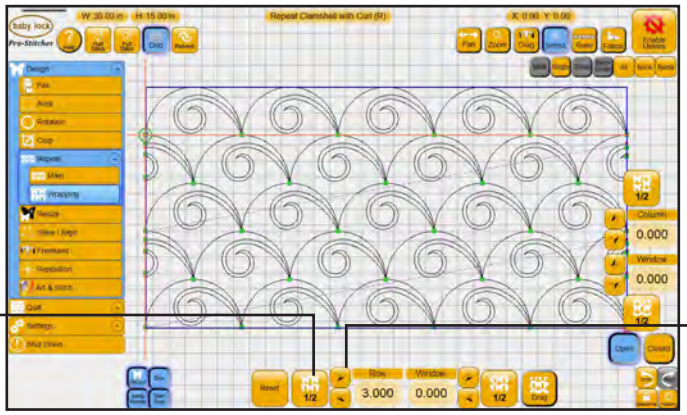
Repeat Wrapping

Use the wrapping options in conjunction with repeated designs. The options enable you to shift rows or columns of repeated designs, or offset the entire design window. Typically you will wrap either a row or a column, but not both.

- On the Design menu, select **Repeat**, then select **Wrapping**.

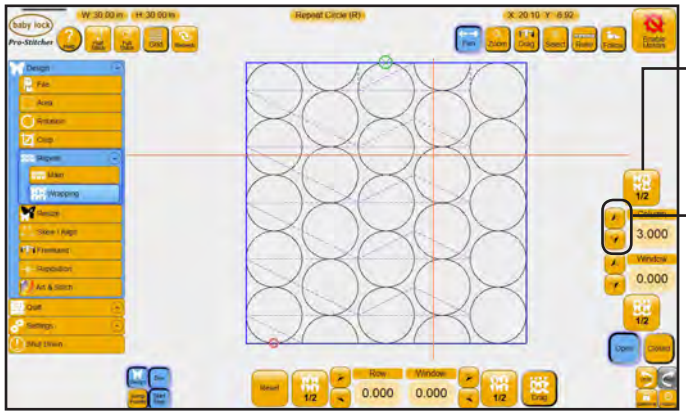

Column wrapping options
Vertical window wrapping options
Removes all of the wrapping actions and resets the design to its unwrapped state.
Column wrapping options
Horizontal window wrapping options

To wrap rows


Shifts every other row of repeated designs by half of the width of the design.
Shifts every other row by 1/8 inch to the right or left.

- To shift every other row of repeated designs (beginning with the second row) by half of the width of the design, select the **1/2 button**.
- Select the **right arrow** button to shift the row to the right by 1/8 inch. Select the **left arrow** button to shift the row to the left by 1/8 inch.
- Or touch the number box under Row and use the number pad to enter a decimal value to offset rows. For example, to move every other row by one inch to the right, enter **1**. To move every other row by one inch to the left, enter **-1**. After you select **Enter**, the rows shift accordingly.

To wrap columns

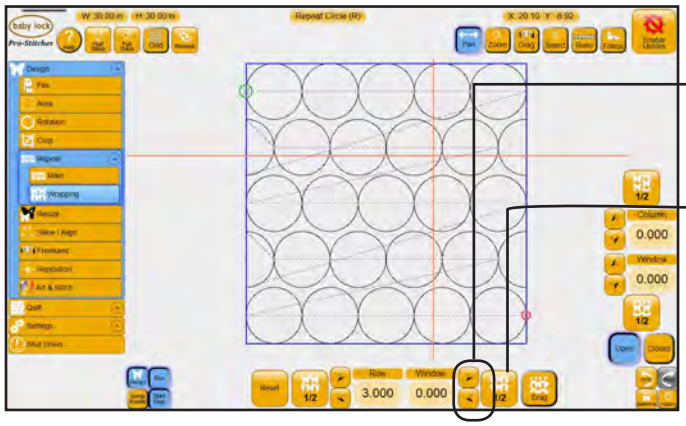

Shifts every other column of repeated designs by half of the height of the design.
Shifts every other column by 1/8 inch up or down.

- To shift every other column of repeated designs (beginning with the second column) by half of the height of the design, select the **1/2 button**.
- Select the **up arrow** button under Column to shift the columns up by 1/8 inch.
- Select the **down arrow** button under Column to shift the columns down by 1/8 inch.
- Or touch the number box under Column and use the number pad to enter a decimal value to shift columns. For example, to move every other column up by one inch, enter **1**. To move every other column down by one inch, enter **-1**. After you select **Enter**, the columns shift accordingly.

To horizontally wrap the design window

Choose from the options along the bottom of the screen to specify how to wrap the designs window horizontally.

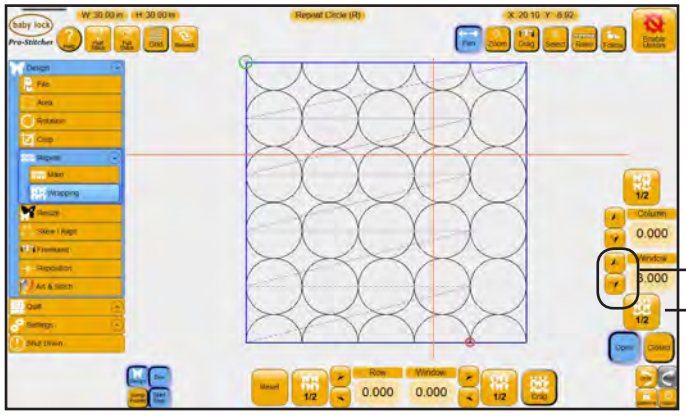
- To shift all rows horizontally by half of the width of the design, select the **1/2 button**.


Shifts all rows of repeated designs by 1/8 inch to the right or left.
Shifts all rows of repeated designs by half of the width of the design.

- Select the **right arrow** button to shift all rows to the right by 1/8 inch.
- Select the **left arrow** button to shift all rows to the left by 1/8 inch.
- Or touch the number box under Window and use the number pad to enter a decimal value to shift the repeated designs. For example, to move all rows by one inch to the right, enter **1**. To move all rows by one inch to the left, enter **-1**. When you select **Enter**, the rows all shift accordingly.

To vertically wrap the design window

Choose from several Window options along the right side of the screen to specify how to wrap the design window vertically.


Shifts all columns of repeated designs by 1/8 inch up or down.
Shifts all columns of repeated designs by half of the height of the design.

- To shift all rows by half of the height of the design, select the **1/2 button**.
- Select the **up arrow** button to shift all rows up by 1/8 inch.
- Select the **down arrow** button to shift all rows down by 1/8 inch.

- Or touch the number box under Window and use the number pad to enter a decimal value to shift the repeated designs. For example, to move all rows up by one inch, enter **1**. To move all rows down by one inch, enter **-1**. When you select **Enter**, the rows all shift accordingly.

To manually wrap the design window

- To manually reposition the design, choose the **Drag** button. Use your finger (or move the machine) to drag the design to your desired wrapping position. The Drag button remains enabled and displays the word Drop; continue to fine tune by dragging the design. When you are happy with the wrapping position, select **Drop**.

Treatment of jump points

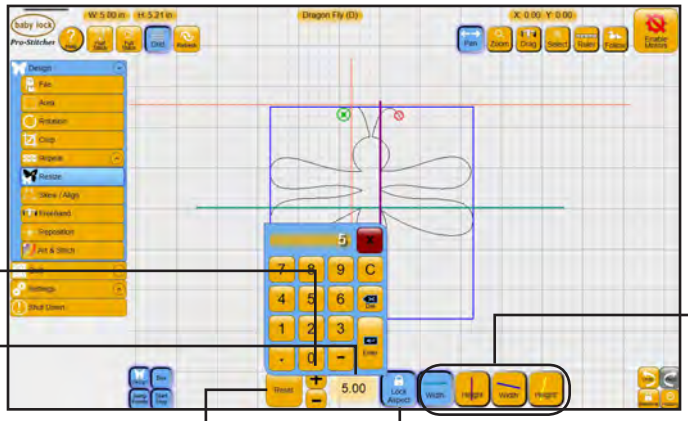
Choose between two ways of handling loose ends, or jump points, that are created from wrapping designs.

- Select **Open** to perform a tieoff at the jump points in a wrapped design. Tie Off Start and Tie Off Finish must be selected in Settings. For more information about the tieoff settings, see *Control how Pro-Stitcher performs tie-offs* in chapter 8, *Settings Menu*.

- Select **Closed** to stitch along the border of the area between jump points in a wrapped design.

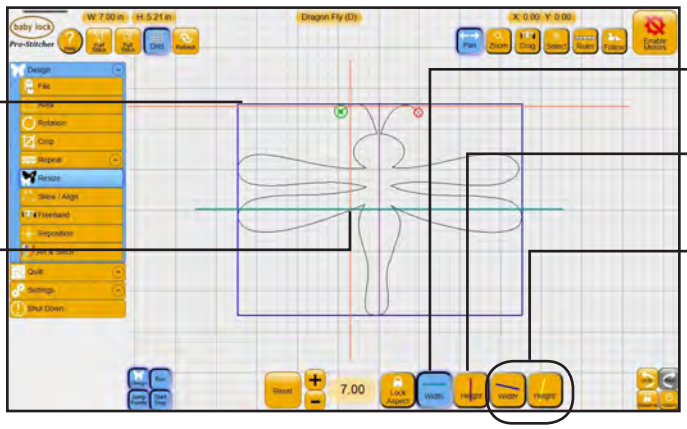
Resize Menu

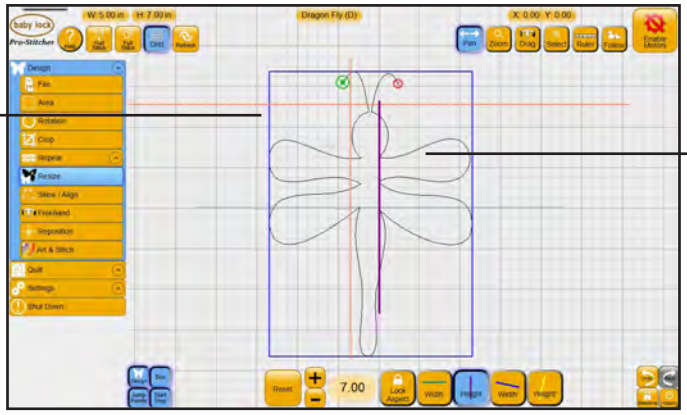
- To open the resize options, select **Design** and then **Resize**.

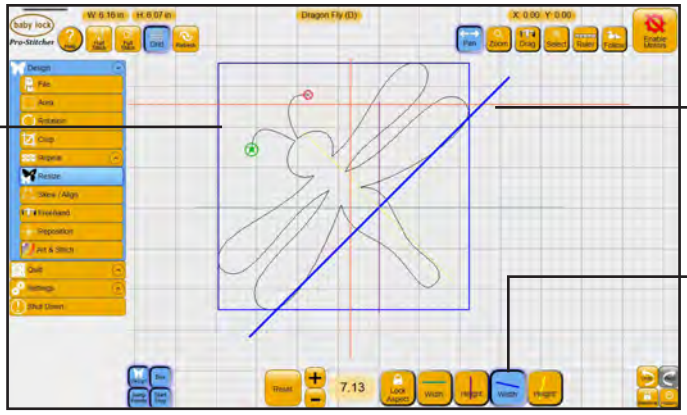

Choose one of the four height and width buttons and then press the Plus Sign or Minus Sign to resize, or enter a resize value in the number box.
Height and Width buttons
Returns the design to its original size.
Ensures the design's aspect ratio remains constant as you adjust height or width.

To resize a design

- Click one of the height or width buttons and then press the **Plus Sign** (+) to increase or **Minus Sign** (–) to decrease, or tapping the number box to directly enter the size (in inches).

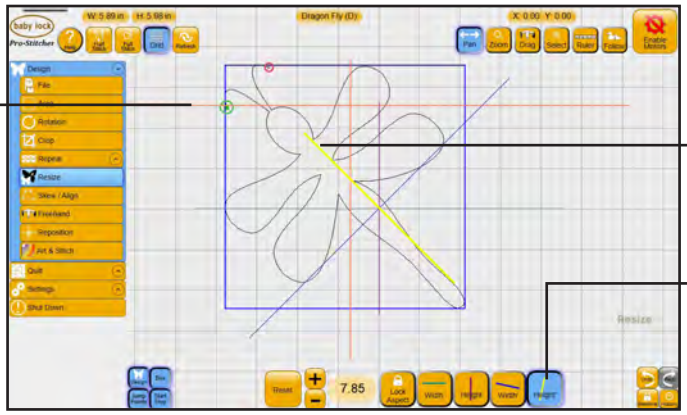

This width of this design was increased.
Green line shows the x-axis, or width of the design, that the Width button adjusts.
Select to adjust the width of the design.
Select to adjust the height of the design.
Original Height and Original Width: Select to adjust rotated designs long their original x and y axes.


This height of this design was increased.
Purple line shows the y-axis, or height of the design, that the Height button adjusts.


This original width of this rotated design was increased.
Blue line shows the original x-axis, or original width of a rotated design.
Select to adjust original width.

- To stretch or shrink the design along the original X axis rather than how it is oriented on the screen, select the **Original Width** button (with the blue angled line) and then press the **Plus Sign** (+) to increase or **Minus Sign** (–) to decrease the size of the design.

NOTE: The Original Width and Original Height buttons are available only if a design has been rotated.


This original height of this rotated design was increased.
Yellow line shows the original y-axis, or original height of a rotated design.
Select to adjust original height.

- To stretch or shrink a rotated design along its original Y axis rather than how it is oriented on the screen, select the **Original Height** button (with the yellow angled line) and then press the **Plus Sign** (+) to increase or **Minus Sign** (–) to decrease the size of the design.

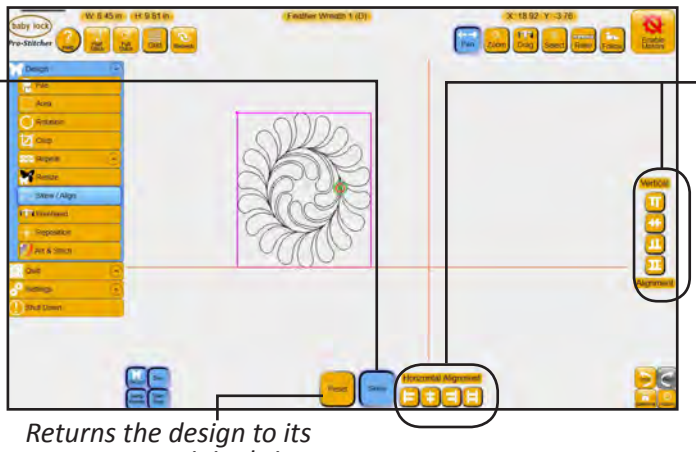
Skew / Align Menu

After you create an area, use the skew and align options to fit the design within the area. These options with convex areas (e.g. triangles, rectangles, and hexagons) of three or more points. Pro-Stitcher does not skew or align designs to a concave area (e.g. stars and crosses).

- Select **Design** and then **Skew/Align**.

Forces a design to stretch to fill an area. Any further actions will also stretch to the limits of the area.

Skew and align options aren't available until you define an area.



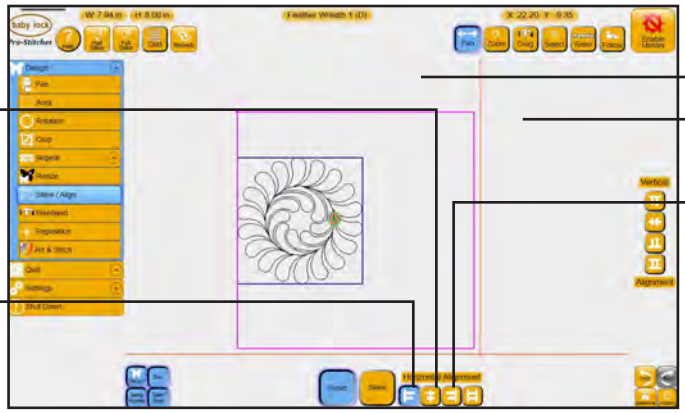
Buttons align the design to the top, bottom, left, or right side of an area, or stretch designs horizontally or vertically.

Returns the design to its original size.

To horizontally align blocks within an area

Align Center: Aligns the horizontal center of the design's bounding box with the horizontal center of the area.

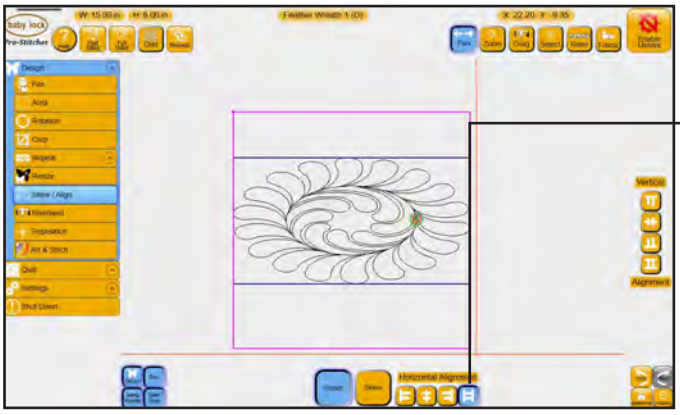
Align Left: Aligns the left side of the design's bounding box with the leftmost point of the area (pictured).



Design bounding box (blue lines)

Defined area (purple lines)

Align Right: Aligns the right side of the design's bounding box with the rightmost point of the area.

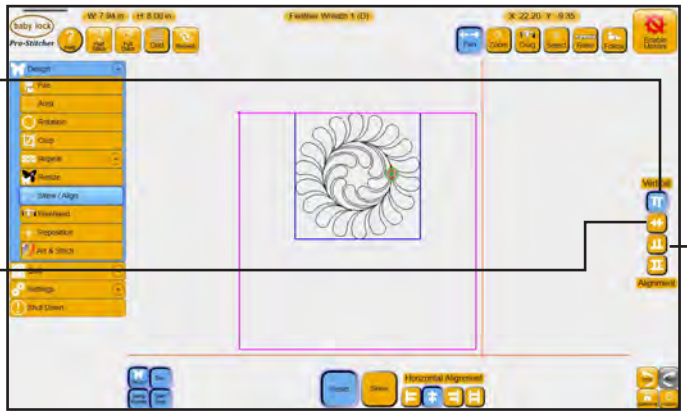


Horizontal Stretch: Stretches or shrinks the design so the left side of the bounding box aligns with the leftmost point of the area and the right side of the bounding box aligns with the rightmost point of the area.

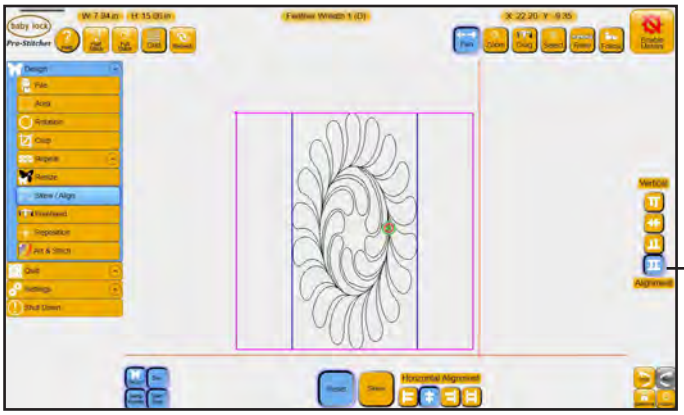
To vertically align blocks within an area

Align Top: Aligns the top of the design's bounding box with the top of the area (pictured).

Align Center: Aligns the vertical center of the design's bounding box with the vertical center of the area.



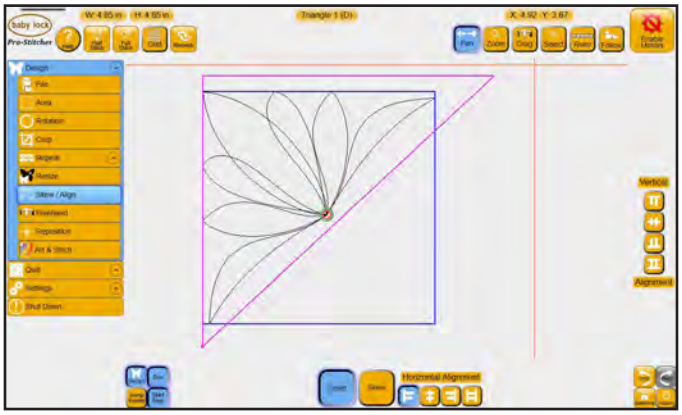
Align Bottom: Aligns the bottom of the design's bounding box with the lowest point of the area.



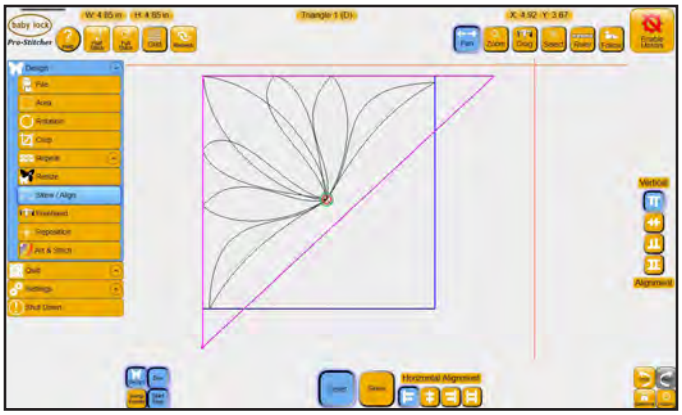
Vertical Stretch: Stretches or shrinks the design so the top of the bounding box aligns with the highest point of the area and the bottom of the bounding box aligns with the lowest point of the area.

To align a triangle design

1. Load a design and rotate 45°.
2. Create a triangle-shaped area using Multi-point.
3. Select **Design**, then **Skew/Align**.
4. Select the **Horiontal Alignment Align Left** button.

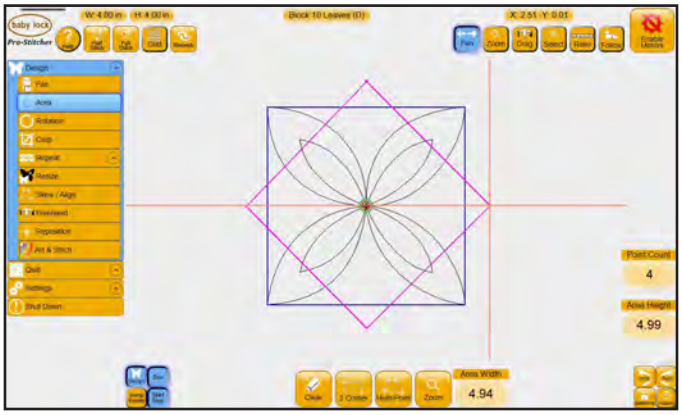


5. Select the **Vertical Alignment Align Top** button.

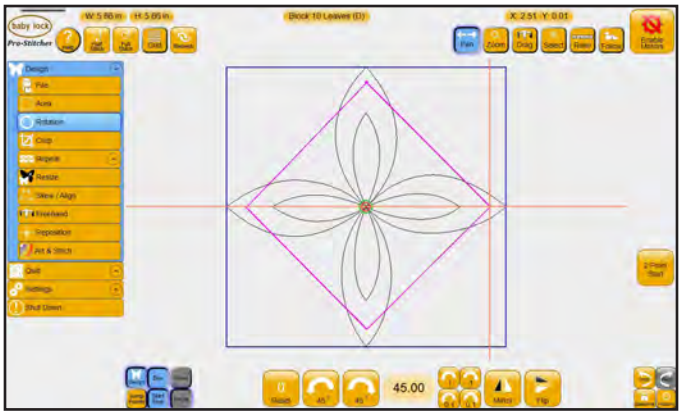


To skew a design to fit an area

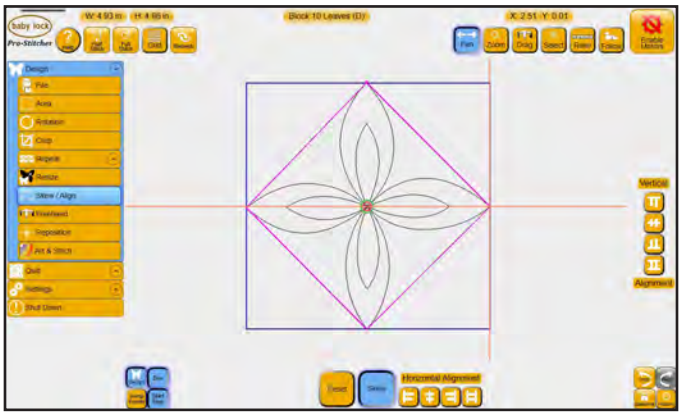
1. Load a design and then create a diamond-shaped area.



2. Rotate the design (Design, Rotate) to fit the area. This design was rotated 45 degrees.



3. Choose **Design**, **Skew/Align**. Select **Skew**.



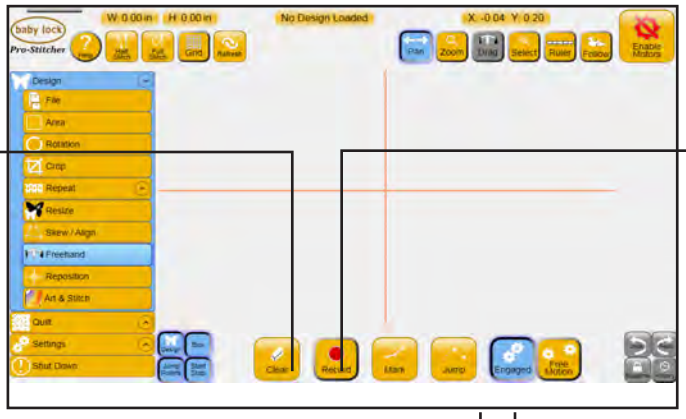
Freehand Menu

Pro-Stitcher can record the movement of the quilting machine. For example, record your own all-over background designs across the width of the quilt. Or record your signature so you can quilt your signature into your quilts. This screen also enables you to quickly switch from using Pro-Stitcher to free-motion quilting.

- Select **Design** and then **Freehand**.

Depending on your Pro-Stitcher configuration, you will see a different screen.

If you have the EZ Carriage


Clears any designs from the work area, as well as any recorded design.
To use a recorded design in the future, save it before selecting Clear.
Press to start or end recording the motion of the quilting machine. If you move the machine before beginning to record again, a stitching line connects where you previously ended recording with where you started.
Press to resume using Pro-Stitcher for quilting.
Press to switch from using Pro-Stitcher to free-motion quilting.

To switch to free-motion quilting

- Select the **Free Motion** button and free-motion quilt as desired. When you are ready to once again quilt with Pro-Stitcher, select **Engaged**.

If you have the carriage with manual levers

You'll see this screen if you have an older version of the firmware running on your quilting machine. It looks and functions exactly like previous versions of Pro-Stitcher.

To switch to free-motion quilting

- Manually raise the levers to switch from using computer-guided quilting to free-motion quilting. To return to using Pro-Stitcher, manually lower the levers.

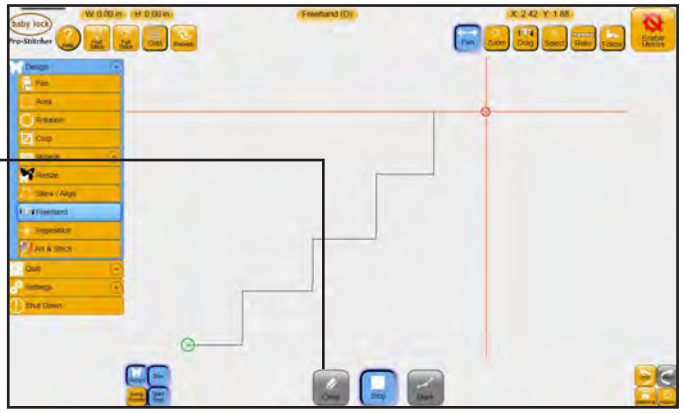
IMPORTANT: If you have a newer version of the firmware running on your quilting machine, you will have two additional buttons. Select the **Machine** button and free-motion quilt as desired. When you are ready to once again quilt with Pro-Stitcher, select **Motors**.

Record the movements of your freehand quilting

To record freehand motion

Clears any designs from the work area, as well as any recorded design.

To use a recorded design in the future, save it before selecting Clear.



- Select **Record**. Begin quilting the design you want to record. When complete, select **Stop**. Save the design to the computer (select **File**, then **Save**).

Machine Quilting Tip: Add recorded stitching to an existing design

Load a design and position the crosshairs where you want to begin recording freehand motion. A stitching line connects the end point of the design and the position of the crosshairs when recording begins.

When adding to an existing design, Pro-Stitcher baselines the design and treats it as a single design when performing other design functions.

To mark and record straight lines

Mark is similar to Record, but instead of recording continuously as you move the machine, it records a straight line between each marked point.

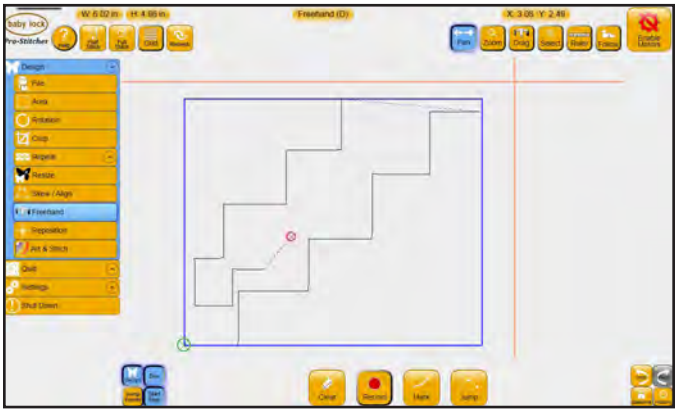
1. Move the quilting machine to the point where you want to begin a straight line and select **Mark**.

2. Move the machine to where you want to end the straight line and again select Mark. Continue marking along the line, stitch the line, or save it as a design for future use.

Move the quilting machine to the beginning of the quilt ditch and select Mark to record the first point of the line. Then move the machine to another point further down the ditch and press Mark again. Continue marking points along the ditch to record straight lines between each marked point. The marked ditch design can then be stitched or saved to stitch at different places on the quilt.

To add jumps to your recorded design

At any point while recording or marking, insert a jump point into your design.



- Stop recording or marking, and then select **Jump**. Continue moving the machine, but no stitch lines will be recorded until you once again select **Record** or **Mark**. Jump lines display as dotted lines.

NOTE: Make sure the Auto Rotate function on the table computer is turned off. This ensures that the screen functions properly as you record the freehand motions.

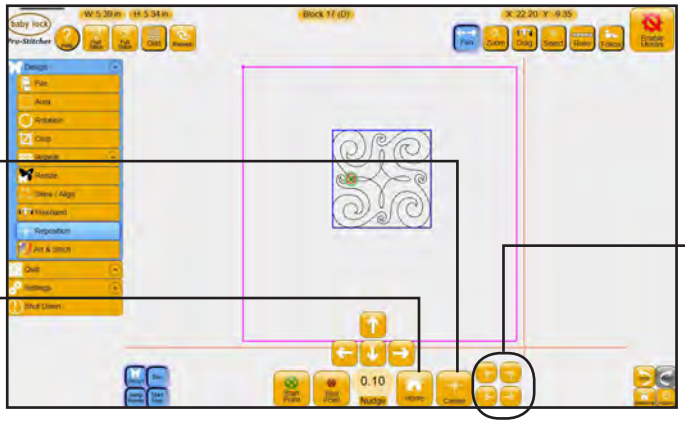
Reposition Menu

The main way to reposition a design for quilting is to create an area based on your quilt and then to use the Reposition or Skew/Align tools to position the design relative to that area. However, you can use the reposition functions even if you haven't defined an area.

NOTE: You can't use the Skew and Align functions with the Reposition functions. For example, if you skew a design to a defined area and then select one of the reposition options, the Skew/Align settings are turned off (essentially resetting the design to its original shape) and the reposition action takes place.

Centers the design at the current needle and crosshair position.

Repositions a design relative to the Home location.



The four corner positioning buttons position a design relative to the crosshairs.

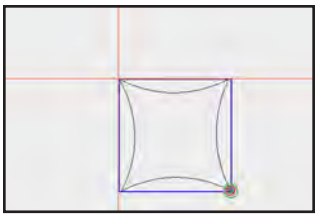
Machine Quilting Tip: To quilt a skewed design multiple times

If you want to stitch a skewed design multiple times on the quilt, baseline the design (select the Baseline button in the lower right corner of the screen) and then reposition the design.

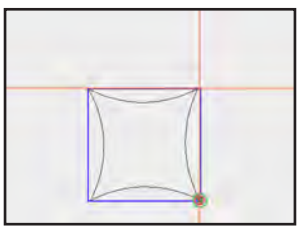
To position a design to the intersection of the crosshairs

- Move the quilting machine needle to a position on the quilt where the design is to be quilted. If you positioned the needle at the top-left corner, press the top-left corner button. Pro-Stitcher aligns the top-left corner of the design with the position of the needle and crosshairs. The bottom-left corner, top-right corner, and bottom-right corner buttons work the same way.

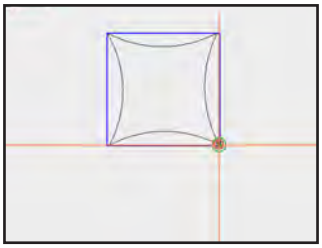
Positions top-left corner of the design at the intersection of the crosshairs.



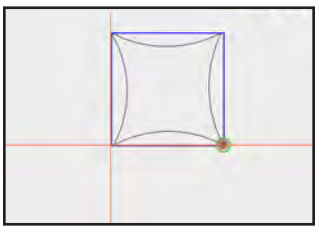
Positions the top-right corner of the design at intersection of the crosshairs.



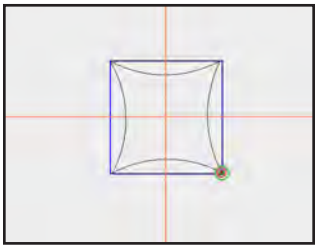
Positions the bottom-right corner of the design at the intersection of the crosshairs.



Positions the bottom-left corner of the design at the intersection of the crosshairs.



Positions the center of the design at the intersection of the crosshairs.



To reposition a design based on the Home location

The Home location of a design is the point in the design where x=0 and y=0. It may be the start point of the design, but other times it may be in the middle or any other point in the design. Some digital designers use the Home location for positioning.

- Move the quilting machine needle to a position on the quilt where you want the Home location to quilt. Press the Home button to reposition the design relative to the Home location.

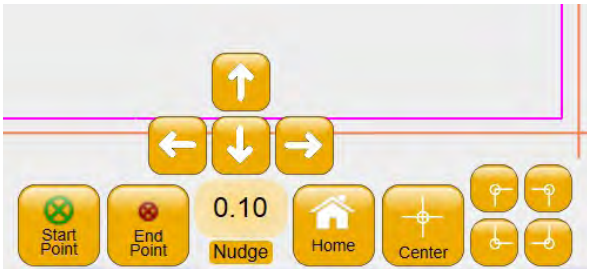
Machine Quilting Tip: Quickly reposition a design to the crosshair position

Use the Home button as a quick-and-dirty positioning tool. For example, if the design is off the screen because the quilting machine has been moved to a new location, press Reset to bring the design closer to the current crosshair position.

NOTE: The Home button is a repositioning tool. Do not select it if the design has already been positioned at the desired location

To position a design based on the center point

- Move the quilting machine needle to the center point of the block or other area of the quilt. Press the **Center** button to center the design at the current needle and crosshair position.



To position a design's start point on the quilt

- Move the quilting machine needle to the point where you want to begin quilting. Press **Start Point** to reposition the start point of the design with the current needle and crosshair position.

To position a design's end point on the quilt

- Move the quilting machine needle to the point on the quilt where you want the quilting to end. Press **End Point** to reposition the end point of the design with the current needle and crosshair position.

To reposition a design up, down, left, or right

- To reposition the design a specific amount in any of the four directions, enter a distance (in inches) in the Nudge number box and then press the appropriate arrow to nudge the design up, down, left, or right. This is especially useful if you want to nudge the design in minute increments.

Machine Quilting Tip: To nudge the design in tiny increments

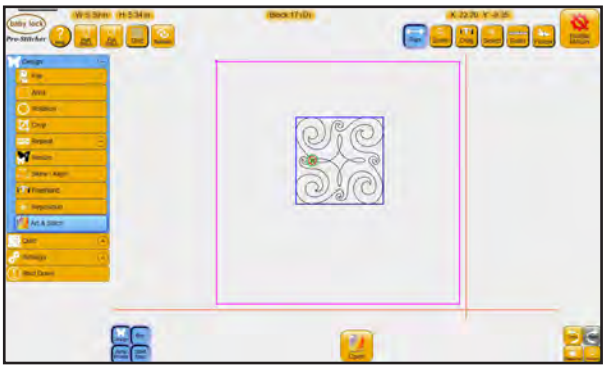
By default the nudge distance is set to one tenth (.10) of an inch. To nudge the machine in smaller, more minute increments, change this value to one hundredth (.01) of an inch.

6. Art & Stitch

Art & Stitch is comprehensive quilting-design software for creating and modifying quilting designs. It is included with Pro-Stitcher. Pro-Stitcher can pass designs quickly and easily into *Art & Stitch* so you can use any of the *Art & Stitch* tools to modify the design however necessary. *Art & Stitch* automatically loads and runs in the background when Pro-Stitcher starts, so passing files from Pro-Stitcher to *Art & Stitch* happens very quickly.

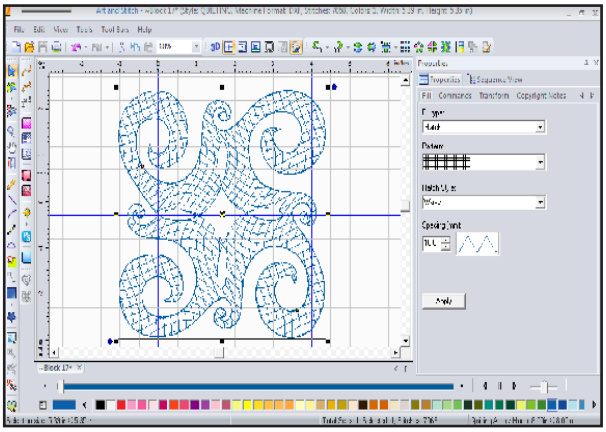
To pass a design to Art & Stitch

1. Select **Design,** and then ***Art & Stitch***. Press **Open** screen to open the *Art & Stitch* software. If *Art & Stitch* is open and has been licensed, the design will open in *Art & Stitch*.



NOTE: If *Art & Stitch* has not yet been licensed, a licensing screen will appear for entering license information. You will not be able to save any changes to the design until you activate the *Art & Stitch* license. Follow the instructions in the *Art & Stitch* instruction manual for offline activation.

2. Press **Close** to bypass registration and open the design.



When the design is passed into *Art & Stitch*, the position information is maintained; as long as the design is not moved in *Art & Stitch*, it will be in the same location when it is passed back to Pro-Stitcher.

Pass the modified design back to Pro-Stitcher by pressing the **Pro-Stitcher** button on the *Art & Stitch* toolbar on the left-hand side of the *Art & Stitch* screen.

CAUTION: If a design is opened in *Art & Stitch* without using the Pro-Stitcher software and the Pro-Stitcher button is pressed to pass the design into the Pro-Stitcher software, the design will be saved in its current state with the same name it had when it was opened. This could lead to

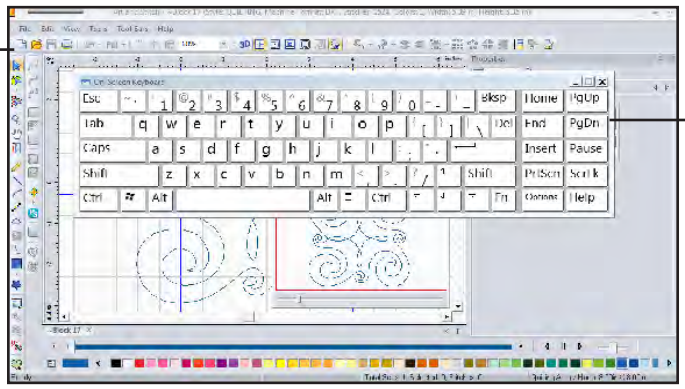
unintentionally writing over a design. To avoid this, always save the design with a new working name when it is directly loaded in ***Art & Stitch*.**

Licensing

When using Art & Stitch for the first time, the quilter must enter some information to activate the license. Refer to the instructions in the Art & Stitch software box for offline activation. All network connections have intentionally been disabled on the Pro-Stitcher computer to prevent the computer from downloading updates or viruses that would adversely affect the performance of Pro-Stitcher.

Using a mouse or keyboard

Touch the gray bar to open the pop-up keyboard.



Press to close the keyboard.
Use these buttons to keep track of changes you make to the design.

Many functions in *Art & Stitch* are much simpler when using a mouse and keyboard. When using the pop-up keyboard, it may be necessary to press an area on the screen where the text is to be entered before typing on the keyboard. While the pop-up keyboard is a quick keyboard solution, it may be more convenient to use a conventional mouse and keyboard. The Pro-Stitcher computer works with most wired and wireless USB keyboards and mice. Just plug the keyboard, mouse, or wireless dongle into an available USB port, wait a minute for Windows to install appropriate drivers, and then use the keyboard or mouse. A USB hub may be used to expand the number of available USB ports. Keyboards, mice, and USB hubs can be purchased from most electronics retailers.

Updating Art & Stitch

Art & Stitch may need to be updated to the latest version for Pro-Stitcher to properly pass designs back and forth. To download the latest version, use a computer that is connected to the Internet and go to the Baby Lock website: www.babylock.com.

To update Art & Stitch

1. Go to the **Products** tab at the top of the page and select **Upgrades/Updates.** Follow the instructions to download the latest version of *Art & Stitch* for Pro-Stitcher. After downloading this installation file, copy it to a USB flash drive and plug it into the Pro-Stitcher computer.

2. Wait approximately 10 seconds for the Pro-Stitcher computer to set up the USB flash drive. Then select **Design**, **File**, and press **Update**.

3. Browse to the appropriate folder on the USB flash drive and double-tap the *Art & Stitch* installation file. The Pro-Stitcher software will close and the installation will begin.

4. If you are prompted to *Repair* or *Uninstall* the *Art & Stitch* software, it is best to uninstall first and then run the installation program again to install the new version.

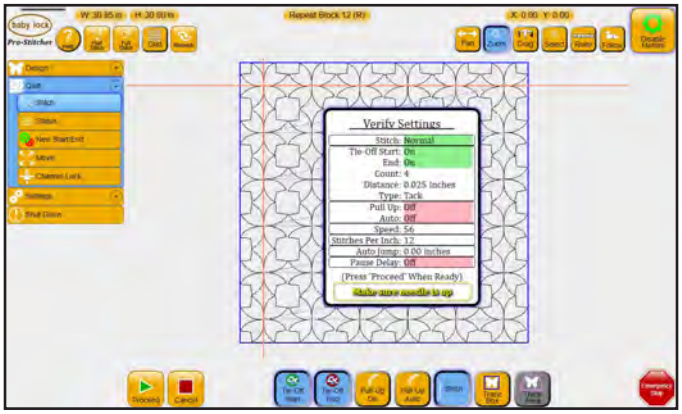
NOTE: To access the file browser after the Pro-Stitcher software is closed, either attach a keyboard or press the keyboard icon at the top left-hand corner of the screen to open the pop-up keyboard. Press and hold the Windows key followed by the letter E to open a file browser to locate and then run the *Art & Stitch* installation file again.

5. After the new version of Art & Stitch is installed, reboot the Pro-Stitcher computer using the Windows Start menu from the bottom of the computer screen. Select either Shut Down or Restart to shut the computer down and restart.

7. Quilt Menu

The functions on the quilt menu enable you to quilt your designs. The Run button is available to start the stitching from any quilt function.

- After the design has been formatted, positioned, and is ready to be stitched, select **Quilt** and then **Run**. If everything looks good, press **Proceed** to begin stitching. Otherwise, press **Cancel**.



If you selected the option to Verify Settings before Quilting in the quilt settings, a pop-up Verify Settings box appears so you can double check the settings before stitching. For more information about turning on or off this option, see *To verify settings before quilting* in chapter 8, *Settings Menu*.

To choose between stitching or tracing the design, bounding box, or area perimeter

- Make sure the Stitch button is enabled (shown in a darker color) for the machine to stitch the quilt according to the selections you make. To disable stitching, press the darkened **Stitch** button. If the Stitch button is disabled, Pro-Stitcher traces the design, bounding box, or area perimeter with the machine but does not stitch. Select the **Stitch** button again to enable stitching.

To immediately stop the machine from quilting

- If you must immediately stop the machine while quilting, press **Emergency Stop**. Unlike Pause, which brings the machine to a gentle stop, the Emergency Stop button immediately stops Pro-Stitcher. To reduce the risk of a torn quilt in case the needle is stuck, Pro-Stitcher also disables the motors.

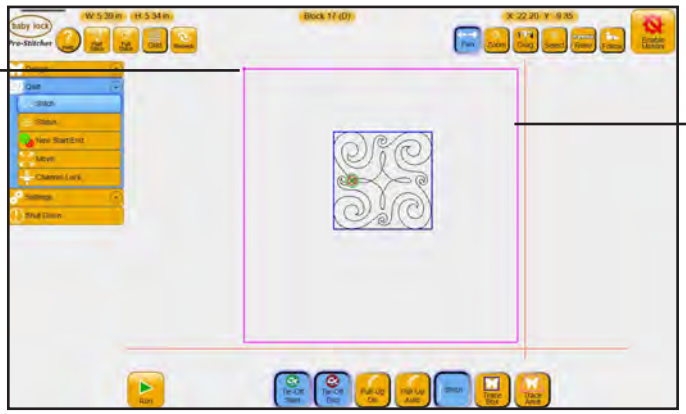
Before you stitch the design on the quilt

Before stitching any design, it's a good idea to double check the position of the design relative to the quilt.

Machine Quilting Tip: Verify the position of the design relative to the quilt

Move the quilting machine needle to a location on the quilt. Select the Follow button in the top-right corner of the screen so the design will move as you move the machine. Look at the screen and confirm that the crosshairs match the desired position in the design. Do this for a variety of places on the quilt, such as the start and end points and the highest and lowest points in the design.

In addition to doing a manual check, use the two Trace options to verify the position of the design's bounding box or the defined area relative to the quilt.



To verify the position of the design's bounding box on the quilt

- Select **Trace Box** and then **Run**. Pro-Stitcher moves the machine around the perimeter of the design, following the blue bounding box. Watch the needle position as the machine traces the design's bounding box to ensure the design will quilt where expected. If the Stitch button is enabled (appears darker), Pro-Stitcher stitches, rather than traces, the bounding box.

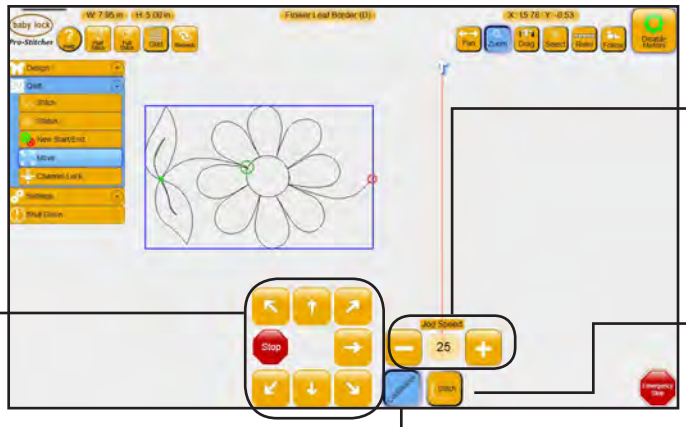
To verify the position of the defined area on the quilt

- Select **Trace Area** and then **Run**. Pro-Stitcher moves the machine around the perimeter of the defined area, shown as purple lines on the screen. Watch the needle position as the machine traces the area's perimeter to ensure the design will quilt where expected. If the Stitch button is enabled (appears darker), Pro-Stitcher stitches, rather than traces, the perimeter of the area.

NOTE: If you've enabled the Stitch button to stitch rather than trace the bounding box or the perimeter of the area, you must manually do tieoffs at the beginning and end of stitching.

Move the quilting machine with Pro-Stitcher

The Move function moves the quilting machine in any of the eight directions indicated by the on-screen arrows.



Press and hold one of the arrow keys to move the machine in that direction.

Control the speed by pressing either the Plus Sign or the Minus Sign, or entering a value (up to 50) in the number box.

Select Stitch to stitch as the machine moves.

*Select **Continuous** and select an arrow key to move the machine. Press **Stop** to end movement or stitching.*

To change the speed at which the machine moves

- Tap the **Plus Sign (+)** to increase the movement speed. Tap the **Minus Sign (–)** to decrease the movement speed. Or select the number box and enter a value (up to 50) in the number pad that appears and then press **Enter**.

To move the quilting machine from within Pro-Stitcher

- Press and hold an arrow button. The selected arrow button changes to a Stop button. The machine moves in the selected direction until you stop pressing the arrow key.

- Alternately, select **Continuous**. Then press (and release) an arrow key. The selected arrow button changes to a Stop button. The machine moves in the selected direction until you press the **Stop** button.

To stitch a straight line using the Move buttons

- Select the **Stitch** button. Press and hold an arrow button. The selected arrow button changes to a Stop button. The machine stitches a line in the selected direction until you stop pressing the arrow key.

Alternately, select both **Stitch** and **Continuous**. Then press (and release) an arrow key. The selected arrow button changes to a Stop button. The machine stitches in the selected direction until you press the Stop button.

Machine Quilting Tip: Straight-line quilting

Use the Move and Stitch options to stitch straight lines for stitch-in-the-ditch, piano-key borders, and cross-hatching. Use the down arrow with stitch to baste down the right and left sides of the quilt. If you also select Continuous, you will be able to use both hands on the quilt to ensure that the quilt top and edges lay flat against the batting.

Pro-Stitcher as a horizontal or vertical channel lock

If you use the channel lock feature in Pro-Stitcher, you will be able to stitch horizontal and vertical lines that are perfectly square with Pro-Stitcher and the frame.

To stitch a horizontal or vertical line with the channel lock

- Select **Horizontal Channel Lock** to lock Pro-Stitcher so it stitches only in a horizontal direction. Press the Start/Stop button on the machine's handlebars and move the machine to stitch the line in a left-to-right or right-to-left direction.

- Select **Vertical Channel Lock** to lock Pro-Stitcher so it stitches only in a vertical direction. Press the Stop/Start button the machine's handlebars and move the machine to stitch the line in a top-to-bottom or bottom-to-top direction.

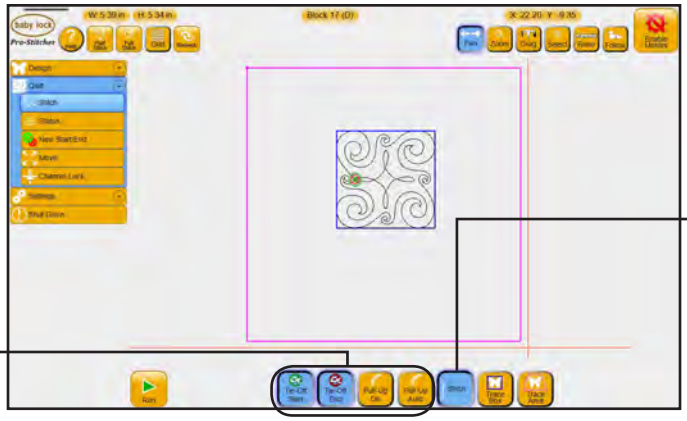
IMPORTANT: Ensure that the carriage motor levers are in the engaged position. You can then manually use the quilting machine handles to stitch either horizontal or vertical lines.

Machine Quilting Tip: To stitch a plumb line with Pro-Stitcher

Ensure your quilt top is loaded squarely on the frame by stitching a horizontal plumb line across the top of the batting and backing. Select Horizontal Channel Lock, press the Start/Stop button on the machine's handlebars, and stitch a plumb line approximately one inch from the top of the quilt backing and batting. Then align the top edge of the quilt top with the plumb line and baste close to the edge so the stitching will be covered by the quilt's binding.

Adjust settings while quilting

While the machine is stitching, you can adjust several quilting settings, such as speed, auto jump, stitches per inch, tieoff, pullup, and pause delay. For more information about quilt settings, see chapter 8, *Settings Menu*. You can also adjust the most commonly used settings directly on the Stitch screen.

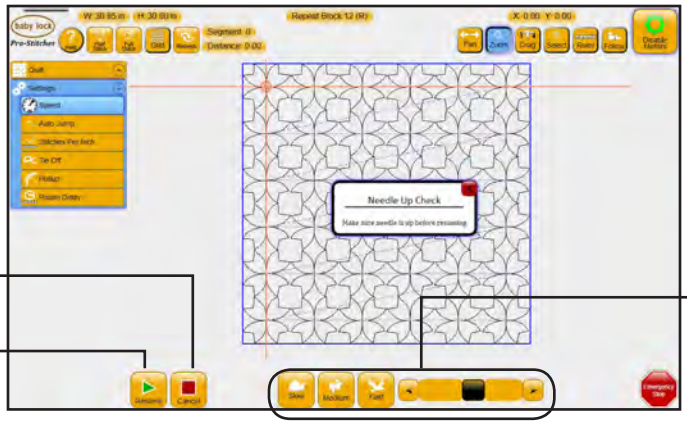

Adjust commonly used settings just before quilting if necessary.
Select the Stitch button to stitch the design on the quilt. Disable the Stitch button to trace the design without stitching.

To adjust commonly used stitch settings

- Select **Quilt** and then select **Stitch** on the menu. Turn on or off the starting or ending tieoffs and choose how to do pullups. For more information about tieoffs and pullups, see *Control how Pro-Stitcher performs tie-offs* in chapter 8, *Settings Menu*. You can adjust these settings while quilting or after quilting is paused.

NOTE: If you disable the Stitch button, the tieoff and pullup options are also turned off. If you select either the Tie Off or Pullup option, the Stitch button is automatically selected.

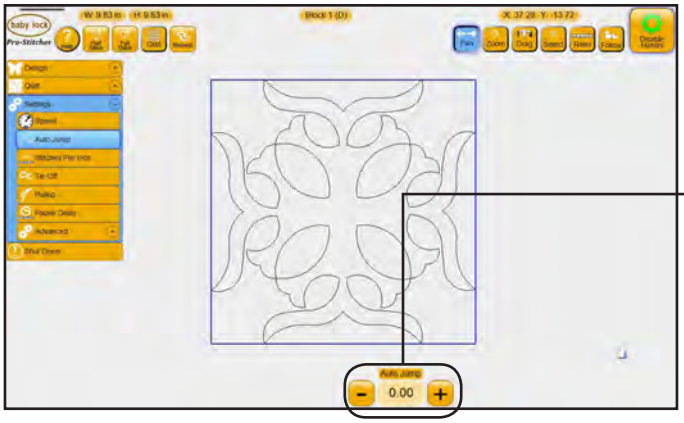
To adjust the quilting speed while quilting


Cancels stitching after pausing
Resumes stitching after pausing
Change stitching speed on the fly – even while stitching.

- Choose **Slow**, **Medium**, or **Fast** to control the stitching speed, or drag the scroll bar to your desired quilting speed. For more information about the quilting speed setting, see *Control how fast Pro-Stitcher operates* in chapter 8, *Settings Menu*.

To adjust the auto jump threshold while quilting

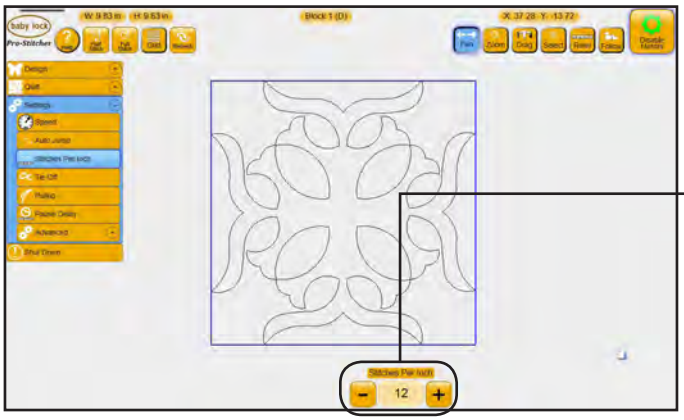
A jump is a gap in a design where there is no stitching. If a jump is less than the threshold, Pro-Stitcher does not pause for you to cut the thread. If a jump is greater than the threshold, Pro-Stitcher pauses for you to cut the thread. For more information about the auto jump threshold, see *Control how Pro-Stitcher handles jumps* in chapter 8, *Settings Menu*.



Change the auto jump threshold by entering a number or using the Plus Sign to increase or the Minus Sign to decrease.

- Select the **Auto Jump** box to specify the maximum length (in inches) of a jump, or gap in a design path. A number pad appears on the screen for you to enter the number, then press **Enter**. Alternately, use the **Plus Sign (+)** to increase or **Minus Sign (–)** to decrease the number.

To adjust stitches per inch while quilting



Change the number of stitches per inch by entering a number or using the Plus Sign to increase or Minus Sign to decrease.

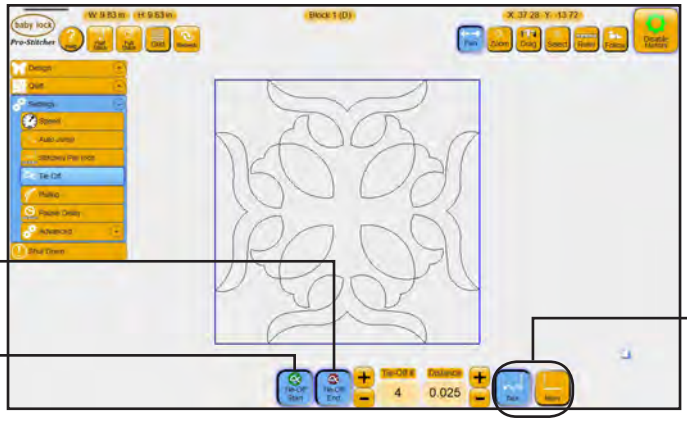
- Enter the number of stitches per inch for quilting the design. A number pad appears on the screen for you to enter a number, then press **Enter**. Alternately, use the **Plus Sign (+)** to increase or **Minus Sign (–)** to decrease the number.

Machine Quilting Tip: The best stitches per inch setting for your design

Smaller designs, especially designs that have lots of curves and circles, may require a shorter stitch length, such as 12 to 18 stitches per inch. Less intricate designs with large curves or circles can use a larger stitch length, such as 10 stitches per inch.

To manage the tieoff settings while quilting

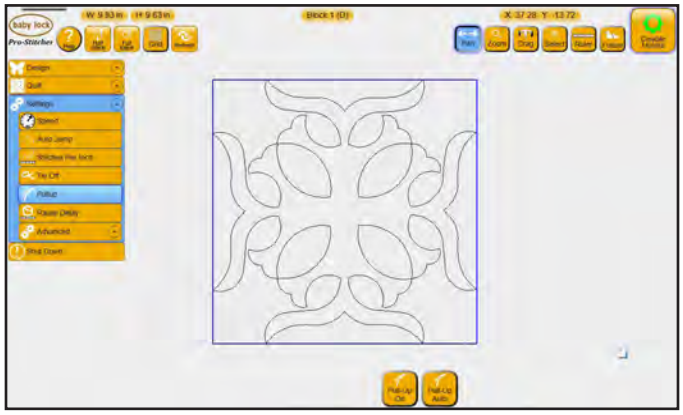
Indicate how to tie off the stitching at jump points and at the start and end of a design. For more information about the tieoff settings, see *Control how Pro-Stitcher performs tie-offs* in chapter 8, *Settings Menu*.


Select to tie off at the end of stitching.
Select to tie off at the beginning of stitching.
Choose whether to tie off with a tacking stitch or with micro stitches.

- Choose **Tie-Off Start** or **Tie-Off End** to indicate your preference for tieoffs. Choose whether to use a tacking stitch or micro stitches for the tieoffs. If you do not select either tieoff option, you will need to manually do the tieoffs.

To change the thread pullup settings while quilting

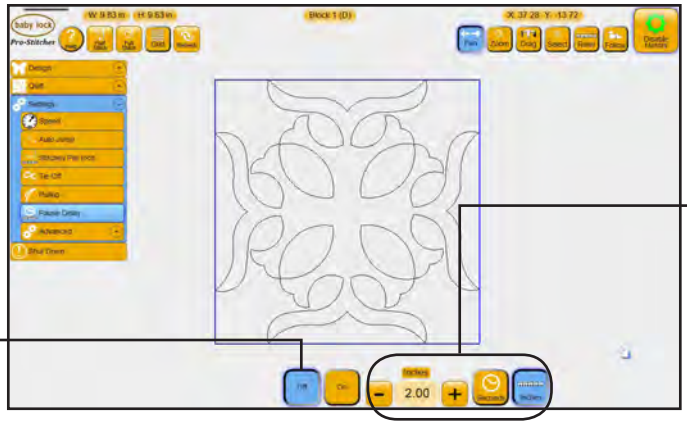
Indicate how to pull up the bobbin thread before quilting a design. Pull-up On brings up the bobbin thread and disables the motors for you to move the machine and pull up the bobbin thread. Pull-up Auto brings up the bobbin thread and then automatically moves the machine aside and pauses for you to grab the threads. In each case, press Resume to continue after grabbing the threads. For more information about the pullup options, see *Control how Pro-Stitcher handles bobbin-thread pullups* in chapter 8, Settings Menu.



- Choose **Pull-up On** or **Pull-up Auto** to indicate your preference for handling pullups. If you do not select either pullup option, you will need to manually pull up the bobbin thread before stitching.

To change the pause delay settings while quilting

After beginning to stitch and following a pullup, Pro-Stitcher does some stitches and then pauses for you to cut the threads. The pause delay setting indicates how much stitching to do, measured in either inches or seconds, before pausing. For more information about the pause delay options, see *Control the delay following a bobbin-thread pullup* in chapter 8, *Settings Menu*.



Turns off the pause delay setting.

Choose Seconds or Inches and then enter a value in the number box to specify how much Pro-Stitcher will stitch before pausing for you to trim the threads.

- Specify how far or how long Pro-Stitcher will stitch before pausing for you to trim the threads. Choose either **Seconds** or **Inches**. Then touch the number box, enter a number into the number pad that appears, and then press **Enter**.

Adjust settings while quilting is paused

On occasion you may need to pause stitching to make further adjustments to settings, to replace a bobbin, or rethread the machine. You can change any of the settings described in the previous section while the machine is paused. However, after pausing the machine, other options are also available: stitch, reposition, status, and new start/end.

To pause quilting

- Press the **Pause** button for the machine to come to a gentle stop. Pro-Stitcher places gold marker at the point in the design where you paused. To make changes to settings, select **Quilt** and then select **Reposition**, **Status**, or **New Start/End**.

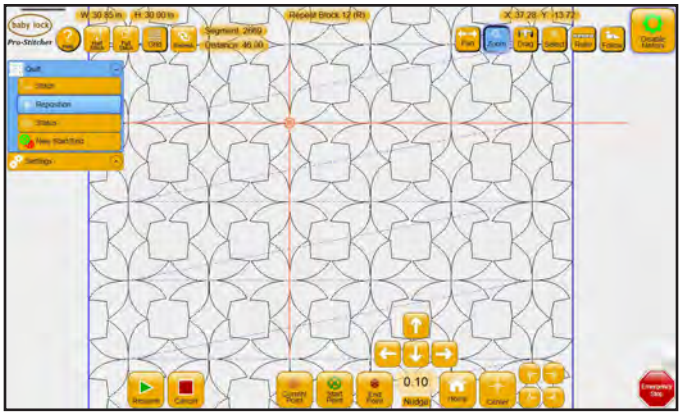
Reposition designs while quilting is paused

At any point after pausing the quilting, you can reposition the design based on the start point or end point.

- After pausing the quilting, select **Quilt**, then select **Reposition**.

To reposition the design while quilting is paused

The Current Point function is available only during a Pause. The Current Point is the point in the design where the Pro-Stitcher paused the stitching. It is marked with a gold marker.

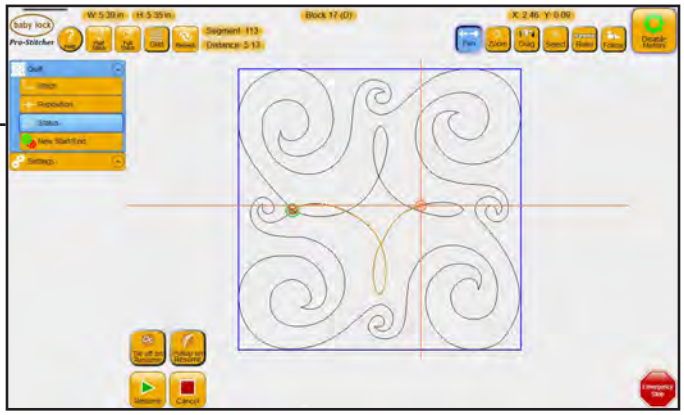


- Move the machine and crosshairs to the desired location and press the **Current Point** button under Reposition. If the Start Point has been altered during a Pause, pressing Resume will cause the Pro-Stitcher to resume from the adjusted Start Point rather than the Current Point.

To see how far into a design the machine has stitched

- After pausing the quilting, select **Quilt** and then select **Status**. Pro-Stitcher displays the line segment being stitched and the distance traveled (in inches).

Select Status to display the line segment being stitched and the distance traveled (in inches).



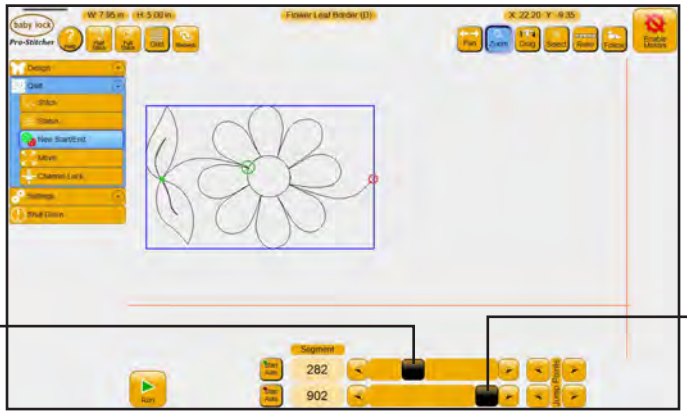
Machine Quilting Tip: Using the line segment and distance information

The line segment information is useful if you want to resume quilting from that exact point, such as when you are quilting over-sized blocks and need to roll the quilt after quilting part of the block. Make a note of the line segment and distance values so that you can begin quilting again at that precise location.

The distance information may be useful in determining how much thread has been used.

Change the start or end point of a design

After the thread breaks or the bobbin runs out of thread, you may need to start quilting from a point other than the design's start point. Similarly, you may want to change the end point to a point other than the design's original end point and quilt only a part of the design.



Drag the top scroll bar to move the start point to a new position in the design.

Drag the bottom scroll bar to move the end point to a new position in the design.

To begin quilting from a point other than the design's start point

- Position the needle where you want to begin stitching and select **Start Auto**. The point in the design that is closest to the crosshairs will be the new start point. Alternately, drag the top scroll bar to move the start point to a new position in the design.

To end quilting at a point other than the design's end point

- Position the needle where you want to end stitching and select **Stop Auto**. The point in the design that is closest to the crosshairs will be the new end point. Alternately, drag the bottom scroll bar to move the end point to a new position in the design.

NOTE: If you select a start point that is beyond the current end point in the design, the end point is adjusted to follow the start point. Similarly, if you select a end point that is before the current start point in the design, the start point is adjusted to come before the end point.

NOTE: If the Start Auto or Stop Auto buttons are selected, the start or end points continue to move as you move the machine and crosshairs.

To adjust start and end points with the scroll bars

The upper scroll bar controls the start point and the lower scroll bar controls the end point.

- Use the left and right arrows at the ends of the scroll bars to fine tune the selection to precisely position the new start or end point.

To set a start or end point to a jump point in the design

- For designs that have multiple jump points, press the **Jump Point arrows** to move either the start or end point to the next jump point in the design.

Machine Quilting Tip: Recovering from a thread break or bobbin change

If the thread breaks while stitching, press Pause. Fix the problem by rethreading the machine or changing the bobbin. Select the Quilt menu and then select the New Start/ End function. Then press the Start Auto button. Press Disable Motors. Move the machine's needle to the place on the quilt where you want to begin stitching again. The crosshairs on the screen will move to the corresponding position on the design. If some fine tuning is needed to move the new starting point forward or back in the design, use the left or right arrows on the scroll bar until the new start point is exactly where desired. Press Start Auto again. Use the Half Stitch button to pull up the bobbin thread. Press the Tie off on Resume and Pullup on Resume buttons to disable. Press Resume to continue quilting.

If the quilt has shifted slightly and the point on the design does not match up exactly with the point on the quilt, move the needle to the exact location on the quilt that matches the new starting point that was just set. Then select Reposition on the Quilt menu and press Start Point. The design shifts to align the new start point with the current needle position. Double check the Tie Off and Pullup settings and press Resume to continue stitching the design.

8. Settings Menu

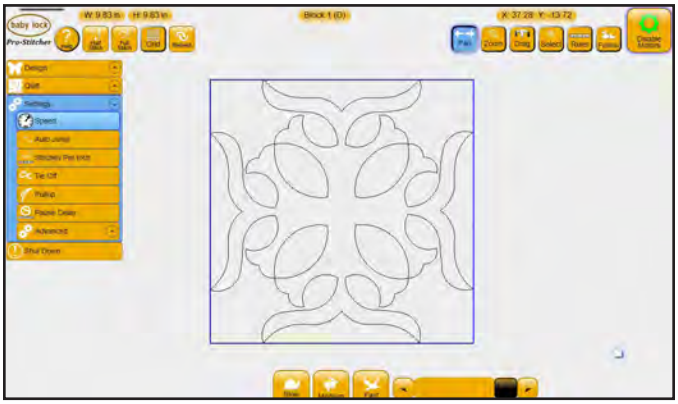
Before stitching any design, it is always a good idea to double-check the settings. Some quilters may find settings that will work for everything they do and never go back to change them. However, most will likely find that different projects will require different settings. Make a habit of checking these settings before quilting any design.

Control how fast Pro-Stitcher operates

The Speed setting sets how fast the Pro-Stitcher carriage will move through the quilting design. Because the quilting machine regulates its own speed to maintain a specific stitches-per-inch setting, the speed does not directly set the needle speed. Instead it sets how fast the machine moves across the frame system.

- Select **Settings**, **Speed**.

To set the default speed



- Choose either the **Slow**, **Medium**, or **Fast** button to set the default speed.
- Alternately, use the scroll bar to select a speed between the slow, medium, or fast settings.

Control how Pro-Stitcher handles jumps

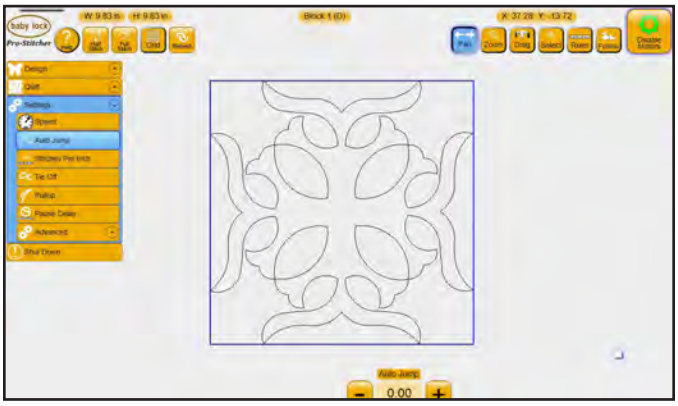
If a quilt design contains jumps, or gaps, in the design path that are not stitched, Pro-Stitcher can either move automatically without stitching through the jump point and begin stitching at the end of the jump or it can pause before the jump so you can trim the thread before it moves to the next starting point.

- Select **Settings**, **Auto Jump**.

Machine Quilting Tip: Avoid long jumps

The longer the jump, the more likely the thread will break or the quilt will gather or become distorted as the machine pulls the thread to the next start point. Set an Auto Jump threshold that is an appropriate number of inches so both your quilt and quilting remains smooth.

To set the Auto Jump threshold



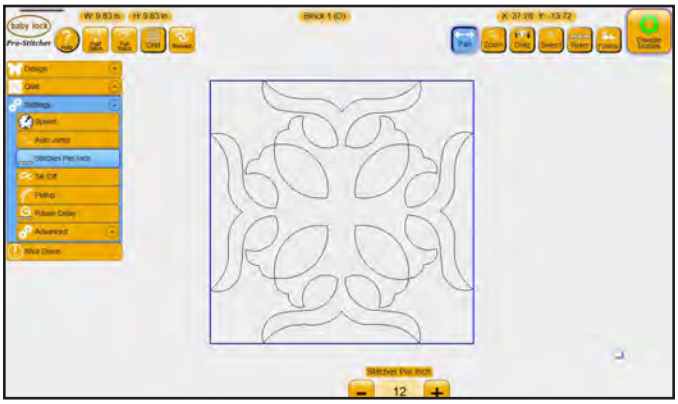
- Press the **Plus Sign (+)** to increase or **Minus Sign (–)** to decrease the Auto Jump threshold by .5 inch. Alternately, touch the number box and type a value directly and press **Enter**.

NOTE: If the jump distance is less than the Auto Jump threshold (number of inches entered in the Auto Jump box), Pro-Stitcher does not pause for you to trim the thread before jumping to the next start point. If the jump is longer than the Auto Jump threshold, Pro-Stitcher pauses before the jump so you can trim the thread.

NOTE: If Tie Off options are turned on, Pro-Stitcher performs a tie off at the jump start and end points, regardless of which jump method is performed. If the Pullup feature is turned on, Pro-Stitcher performs a pull up at the end of the jumps that exceed the Auto Jump threshold.

Control the number of stitches per inch

- Select **Settings**, **Stitches Per Inch**.



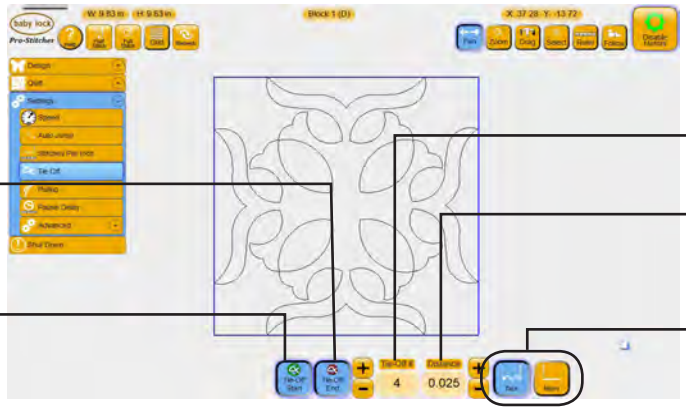
To set the stitches per inch

- Press the **Plus Sign (+)** to increase or **Minus Sign (–)** to decrease the stitches per inch. Alternately, touch the number box and type a value directly and press Enter.

Control how Pro-Stitcher performs tie-offs

By tieing off at the beginning and ending of stitching, the stitches will be secure and will not come undone. The Tie Off feature enables you to select your preferred method for how and when Pro-Stitcher performs tie-offs.

- Select **Settings**, **Tie Off**.


Select Tie-Off End to perform a tie-off at the end of each segment in the design.
Select Tie-Off Start to perform a tie-off at the beginning of each segment in the design.
Specify how many tie-off stitches are done.
Specify the length of tie-off stitches in inches.
Choose either the Tack or Micro method of tie-off.
4
0.025

To have Pro-Stitcher perform a tie-off at the beginning of stitching

- Select **Tie-Off Start**.

To have Pro-Stitcher perform a tie-off at the end of stitching

- Select **Tie-Off End**.

To indicate how many tie-off stitches Pro-Stitcher will perform

- Press the Tie-Off # **Plus Sign (+)** to increase or **Minus Sign (–)** to decrease the number of tie-off stitches Pro-Stitcher performs. Alternately, touch the number box and type a value directly and press **Enter**.

NOTE: The number you specify is the number of full stitches that are formed, not the number of times the needles cycles. For example, if the tie-off number is set to 2 and you selected the Micro method, the needle cycles three times before beginning to stitch the design. Alternately, if you selected the Tack method, the needle cycles five times to form two stitches forward and two stitches back.

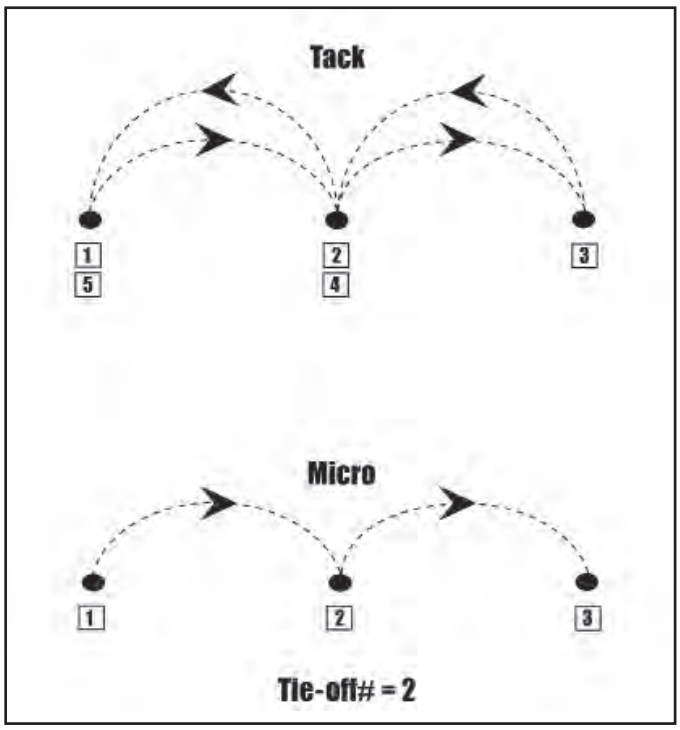
To set the length of each tie-off stitch

- Press the Distance **Plus Sign (+)** to increase or **Minus Sign (–)** to decrease the distance in inches for each tie-off stitch. Alternately, touch the number box and type a value directly and press **Enter**.

To select the method of tie-off stitch: Micro or Tack

- Press **Tack** to select the Tack method of tie-off. The Tack method forms the selected number of stitches forward into the design and then back to the start point before beginning to stitch the design, thus doubling the number of stitches selected.

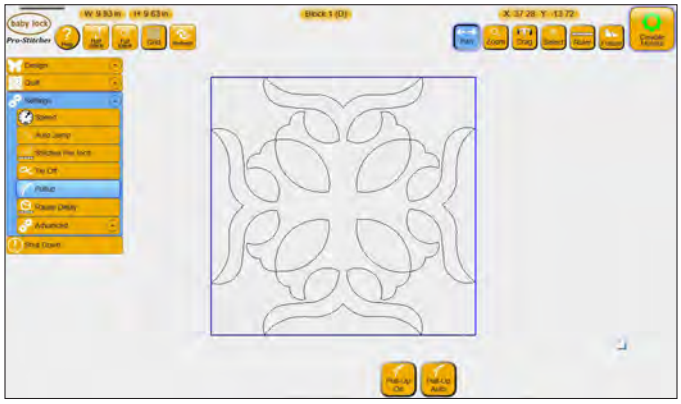
- Press **Micro** to select the Micro method of tie-off. The Micro method forms the set number of tie-off stitches forward into the design and then begins stitching from there. When stitching the design is coming to an end, Pro-Stitcher stops stitching just before the end point and performs the selected number of tie-off stitches to the end of the design. This method does not back over itself and is more likely to be pulled loose than the Tack method. However, it is much less noticeable than the Tack method because there is no build-up of thread.



Control how Pro-Stitcher handles bobbin-thread pullups

Pro-Stitcher can be set to automatically pull up the bobbin thread at the start of stitching a design. It can pull up the thread and automatically shift aside for you to grab the threads or it can pull up the thread and enable you to manually move the machine aside to pull up the thread.

- Select **Settings**, **Pullup**.



To turn on bobbin-thread pullups

- Press **Pull-Up On** for Pro-Stitcher to perform a pull up at the beginning of the design and at the beginning of each segment following a jump that exceeds the Auto Jump threshold.

To turn on automatic bobbin-thread pullups

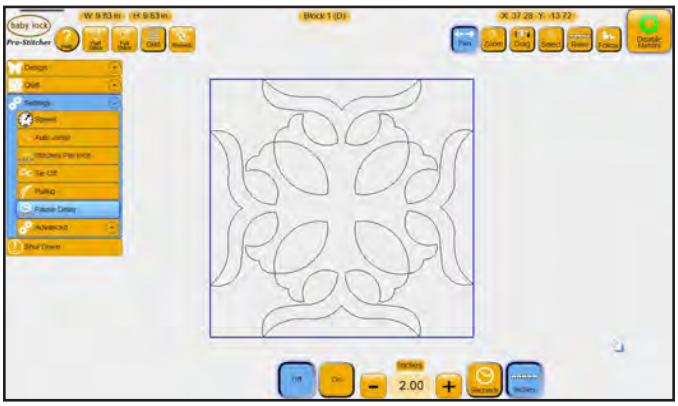
- Press **Pull-Up Auto** for Pro-Stitcher to shift the quilting machine to the right a few inches after pulling up the bobbin thread so you can grab both threads. Press **Resume** to continue quilting the design.

NOTE: If Pull-Up Auto is not selected, but Pull-Up On is selected, the quilting machine will take a stitch at the start point and then disable the motors. This enables you to manually push the quilting machine aside to pull up the bobbin thread. Press Resume for the machine to move back into position and resume quilting.

Control the delay following a bobbin-thread pullup

The Pause Delay feature pauses the quilting machine shortly after starting into a design and after each time a pullup is performed. This enables you to safely trim the thread tails.

- Select **Settings**, **Pause Delay**.



To set the Pause Delay

- Select **On** to turn on Pause Delay or **Off** to turn off Pause Delay.

You have the option of setting the Pause Delay in seconds (how long of a delay) or inches (how far it stitches before pausing).

To set Pause Delay in seconds

- Select **Seconds** and then press the **Plus Sign (+)** to increase or **Minus Sign (–)** to decrease the number of seconds for the pause. Pro-Stitcher will pause the number of seconds indicated so you can trim thread tails and then resume stitching.

To set Pause Delay in inches

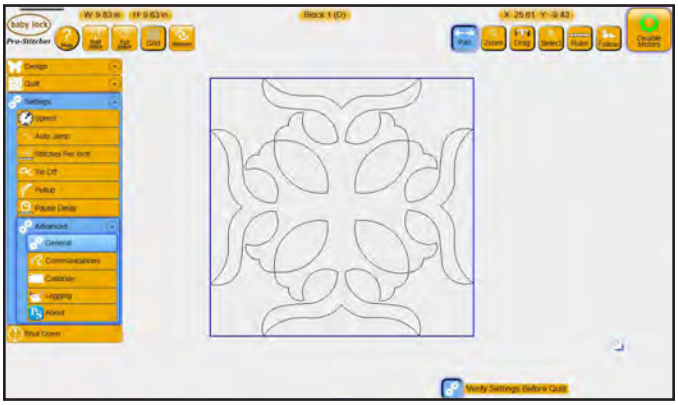
- Select **Inches** and then press **Plus Sign (+)** to increase or **Minus Sign (–)** to decrease the number of inches Pro-Stitcher stitches before pausing. Press Resume after trimming thread tails to continue stitching.

Advanced Menu

The Advanced Menu contains options that you will rarely need to use. Many are used by technicians as they help to diagnose any issues you may experience with Pro-Stitcher.

General Options

- Select **Settings, Advanced**, **General**.



To verify settings before quilting

- Press the button next to Verify Settings Before Quilt to have Pro-Stitcher display a pop-up box with all of the current settings. This gives you the opportunity to verify that everything is set up properly before stitching. If you don't want to see this box, disable the button.

Communications Options

The Communication sub-menu enables you to manually establish communications with either the quilting machine or the Pro-Stitcher motors.

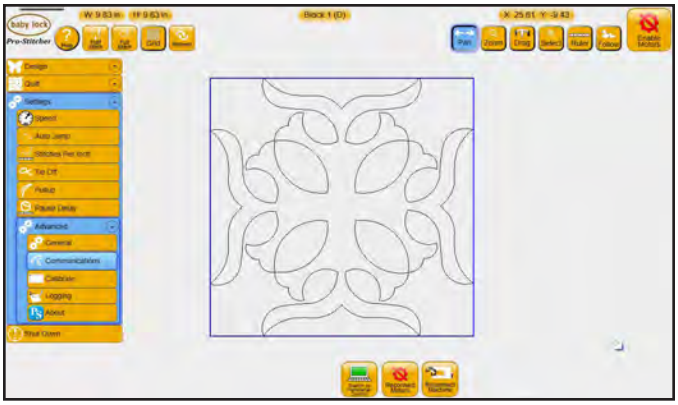
- Select **Settings**, **Advanced**, **Communications**

To stop communications between Pro-Stitcher and the quilting machine

- Press **Switch to Handlebar Control**. The button changes to say Connect to Pro-Stitcher. To reestablish communications, press **Connect to Pro-Stitcher**.

To reconnect motors

If the Pro-Stitcher motors ever become unplugged or disconnected from the computer, it may be necessary to reestablish communications between the Pro-Stitcher computer and the motors.



If the Pro-Stitcher computer cannot communicate with the motors for any reason, it will be indicated by a lightning bolt icon at the top right-hand corner of the screen.

- Press **Reconnect Motors** or the **Motor Error** button in the top right-hand corner of the screen to reestablish communications between the Pro-Stitcher computer and the motors.

To reconnect the machine

You may need to reestablish communications between Pro-Stitcher and the quilting machine. For example, this happens when you start the Pro-Stitcher computer while the quilting machine is turned off.

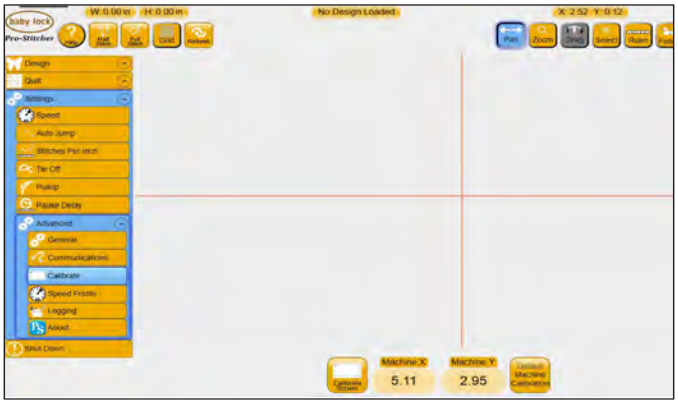
- Press **Reconnect Machine** to reestablish communications between the Pro-Stitcher and the quilting machine.

Easily test whether Pro-Stitcher is communicating with the quilting machine by pressing the Full Stitch button at the top of the Pro-Stitcher screen, or looking at the touchscreen on the quilting machine's handlebars. If there is communication between the quilting machine and Pro-Stitcher, the quilting machine's touchscreen will indicate it. If they are connected, the quilting machine will cycle the needle. If they are not communicating, nothing will happen. If the Pro-Stitcher computer can detect that it is not communicating with the quilting machine, a lightning bolt icon will appear in the top left-hand corner of the Pro-Stitcher screen. Pressing that button will perform the same function as the Reconnect Machine button.

Calibrate Options

If the touch screen is not calibrated properly, the cursor will not move to the points you touch on the Pro-Stitcher computer screen. Resolve this by recalibrating the touch screen.

- Select **Settings, Advanced**, **Calibrate**.



To calibrate the Pro-Stitcher computer screen

- Press **Calibrate Screen** and follow the onscreen calibration instructions.

NOTE: If calibration is so far off that the Calibrate button cannot be pressed, plug the keyboard/mouse into a USB port on the computer using the provided USB extension cable and use the mouse controller built into the keyboard to click the Calibrate button. Most other USB mice will also work for this as well.

Speed Profile

The Speed Profile enables you to customize the relationship between quilting speed and the precision needed to quilt intricate designs.

To set your speed profile

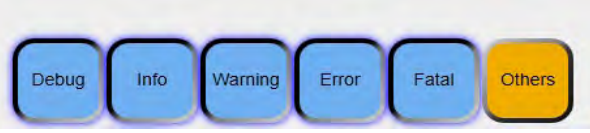
- Select **Default** for most quilting designs. Only if you feel that the quilting design requires more precision should you ever need to change the setting.
- Select **Precision** to stitch intricate designs more slowly.
- Select **Speed** for more speed than Precision, but to ensure curves are stitched smoothly.

We recommend that you use the Advanced options only as advised by a technician.

Logging Options

The logging options are for troubleshooting Pro-Stitcher by a technician.

- Select **Settings**, **Advanced**, **Logging**



About

This option shows version information for the Pro-Stitcher software.

Shut Down

Three shutdown options are available on the Shut Down menu.

To shutdown all software and power down the computer

- Select **Shutdown** from the menu. Then select the **Shutdown** button.

You should do a full shutdown when done using Pro-Stitcher.

To shutdown the software and computer, and then start up again

- Select **Shutdown** from the menu. Then select the **Reboot** button.

If you suspect there may be computer-related issues interfering with Pro-Stitcher, rebooting the computer often will help.

To exit Pro-Stitcher but keep the computer running

- Select **Shutdown** from the menu. Then select the **Exit to Windows** button.

At times it may be necessary to close down the Pro-Stitcher software and use the standard Windows operating system.

To restart the Pro-Stitcher software from Windows

- Locate the Pro-Stitcher shortcut icon on the desktop and double-tap it.

9. Troubleshooting

Problem/Symptom	Corrective Measure
No display on the touch-screen monitor	
LED near the battery symbol at the top left-hand side of the screen is blue and the Windows button at the bottom left-hand corner of the screen is **NOT** lit.	The Pro-Stitcher computer is powered off. Press the Power button at the top left-hand side of the computer to turn it on.
LED near the battery symbol at the top left-hand side of the screen is NOT lit and the Windows button at the bottom left-hand corner of the screen is NOT lit.	There is no power to the tablet computer. Ensure the power cord to the Pro-Stitcher is plugged into a powered outlet on one end and the power supply under the carriage on one of the Y branch ends of the power cord. Also check that the round barrel connector is plugged firmly into the mating cable connector under the Pro-Stitcher carriage. If all cables are plugged in properly and the LED remains off, press the Power button on the top left-hand side of the monitor.
The Windows button is Orange or Blue.	The computer may be in a standby or screen saver mode. Tap the display to wake the system up. If that does not work, press the Windows button to wake it up.
Touch-screen monitor is not calibrated	
Touching the monitor in one place on the monitor puts the cursor in a place other than where the monitor was touched.	Recalibrate the touch-screen by going to SETTINGS -> ADVANCED -> CALIBRATE and follow the calibration instructions.
The stitch regulator cable is not connected properly	
The Pro-Stitcher moves but does not stitch.	Make sure the gray flat stitch regulator cable is plugged into the back of the C-Pod, the encoder wheel on the back wheel of the quilting machine, and the encoder wheel on the carriage. Check the black cable that connects the Pro-Stitcher to the machine encoder wheel. This cable has a 3-wire connector at the end that plugs into the machine's stitch regulator encoder circuit board attached to the back left wheel of the quilting machine. Verify the Pro-Stitcher and the quilting machine are communicating with each other by pressing Reconnect Machine in the Settings -> Advanced menu. If the two systems are communicating, pressing the **Full Stitch** or **Half Stitch** buttons on the Pro-Stitcher will result in the quilting machine's needle performing that function. Check the gray stitch regulator cable for damage *(the end of the cable that plugs into the C-Pod will have one wire clipped – this is normal*).

Problem/Symptom	Corrective Measure
The Pro-Stitcher stitches, but the stitch lengths vary and the quilting machine slows down or even stops in some directions.	The problem can be narrowed to a specific encoder wheel by running the quilting machine manually. Start the quilting machine from the handlebars in Stitch Regulated mode and only move the machine left and right. Then try only moving front and back. If the quilting machine stops stitching while moving front and back, then the problem is with the encoder mounted to the back of the machine. If it stops stitching left and right then the problem is with the encoder on the carriage. Make sure the encoder wheels roll on the tracks when moving the quilting machine and also that the gray stitch regulator cable is plugged in securely to the encoders.
The white gears do not engage the blue flexirack	
When the quilting machine is pushed by hand, the horizontal and/or vertical crosshair lines do not move.	Make sure the white gears fully engage the blue rack. Use the manual engagement/disengagement tool to adjust. Insert into the hole at the front of the EZ Carriage.
The X and/or Y axis gears are only partially engaged	
Stitched designs appear jagged or wobbly. With the Pro-Stitcher powered and motors engaged and enabled (locked in position), pressing the machine side to side or front to back allows a little motion but the white gear does not rotate.	Make sure the white gears completely engage the blue rack. If the X-axis gear does not naturally fully engage without lowering the white gears, it may be because the X-axis motor assembly is slightly narrower than the carriage. It may be necessary to insert a thin washer between the X-axis assembly bracket and the side(s) of the carriage. To do this, remove the black screws that mount the motor assembly to the sides of the carriage and wedge the washers between the inner wall of the carriage and the motor assembly bracket. This should relieve the pressure/bend added to the motor assembly if it is slightly undersized for the carriage.
One or more of the pulleys/gears on the X or Y axis assemblies are loose	
Stitched designs appear jagged or wobbly. With the Pro-Stitcher powered and motors engaged and enabled (locked in position), pressing the machine side to side or front to back allows a little motion and the white gear does rotate.	Monitor the motor assembly while engaged and enabled to determine which gear/pulley is slipping. It will most likely be either the gear mounted directly to the motor shaft or the gear mounted to the shaft that drives the white gear. Use the appropriate Allen wrench to tighten both set screws on the gear. The motor gear requires a 1/16” Allen wrench and the larger gear on the drive axle with the white gear requires a 5/64” Allen wrench.

Problem/Symptom	Corrective Measure
Lubrication required between white gears and blue rack	
When the Pro-Stitcher carriages are engaged, squeaking can be heard as the machine is pushed or driven.	Lubricate the teeth of the white plastic gears for both the X and the Y axes by applying a small amount of silicone lubricant to the teeth of the white gears. Do not use a solvent-based or an oil-based lubricant (such as WD-40 or sewing machine oil) as this will attract dust and eventually clog the gears.
Positioning a pattern using the Reset Home button	
When the Reset Home button is pressed, the pattern is not positioned properly.	The Reset Home button is not intended to be used as a re-positioning tool. Reset Home simply makes the current needle position match up with the "X=0, Y=0" point of the pattern. This "0,0" position can vary from pattern to pattern, so the best way to reposition is by using the Area or Reposition tools from the menu.
Quilting machine stuck in a faster speed than selected by Pro-Stitcher	
Stitch length is much smaller than selected, machine running faster than it should.	Something has caused the quilting machine to lock up at a higher speed (tighter SPI) than selected. Rebooting both the quilting machine and the Pro-Stitcher computer should resolve the issue.
No patterns or folders show up in the design library	
The current path is pointing to the wrong drive letter. **Baby Lock highly recommends backing up all pattern files on a home computer or another disk.*	Designs are stored on the computer's hard drive and on the removable USB flash drive. If you are attempting to access designs specifically on the USB flash drive, make sure the USB flash drive is plugged in securely to the Pro-Stitcher computer. Press Cancel if the Open screen is already open, remove the USB flash drive, wait about 15 seconds, and then press the Open button again. The patterns that come pre-loaded on the Pro-Stitcher USB Flash drive are located in a folder called Designs on the USB flash drive (usually drive D:\ or E:\). From the Open window, select a drive letter by pressing on the arrow button next to the drive you wish to browse. If there is a circle with a ^ symbol on the right-hand side of the button, it means there are more folders in that particular path. If there continues to be nothing showing up on the USB flash drive, plug it into a desktop or laptop computer and verify that the USB flash drive has the desired files on it. If the computer says it wants to reformat the flash drive then the flash drive has gone bad and will need to be replaced. If it opens but there are no files on the flash drive, contact Baby Lock for replacement files.*

Problem/Symptom	Corrective Measure
Jumps between repeated patterns	
Use of any of the Repeat options results in a jump between each pattern	When using the Repeat functions, if the start and/or stop points are within the block of the pattern (i.e. they are not located at the left and right-hand sides of the pattern block) and/or not at the same height, there will be a jump between each repeat of the pattern. This can be corrected by selecting the Point 2 Point box in the Repeat screen.
Error messages	
Motor Error with lightning bolt icon in the top-right corner (may occur with various types of Motor Error messages on the screen).	This will occur with various types of motor errors. Generally they mean that the Pro-Stitcher cannot communicate with the motors. Check that the carriage is plugged in and that the serial cables are connected properly into the box behind the Pro-Stitcher computer. If everything is connected properly and power is on, press the lightning bolt button to attempt to reestablish communication with the motors. The icon will turn to either a red or green motor button once communications are re-established.
Buffer Underflow	If a message with the words Buffer Underflow appears while stitching, it is an indication that data is not getting to the motors quickly enough. This may be due to something in the computer tying up the CPU. Although it may be possible to resume quilting by simply pressing red X box to close the error message and then pressing the Motor Error lightning bolt button at the top right-hand corner of the screen, it is best to cancel the current design stitch-out, save the pattern, and re-boot the computer. Use the New Start Point function if necessary to resume from where stitching was left off.
System Restore or **System Repair** message on boot-up.	If a message appears on boot-up (black screen, white text) that asks whether to run System Restore or Start Windows Normally, select Start Windows Normally by using the keyboard. Plug the keyboard into the open USB port using the USB extension cable and press Start Normally and the system should resume as normal. The computer will default to the System Restore screen (more of a typical Windows blue/white screen) if you do not select the Start Normally option in time. If this occurs, use the power switch to reboot the computer and try again.